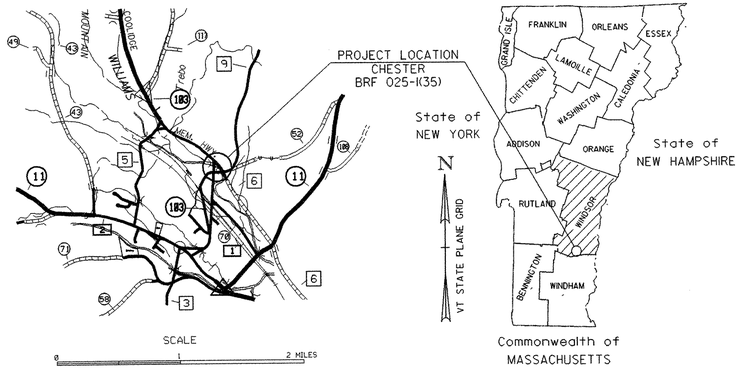
SEE SHEET 2 OF 79 FOR INDEX

# STATE OF VERMONT
# AGENCY OF TRANSPORTATION

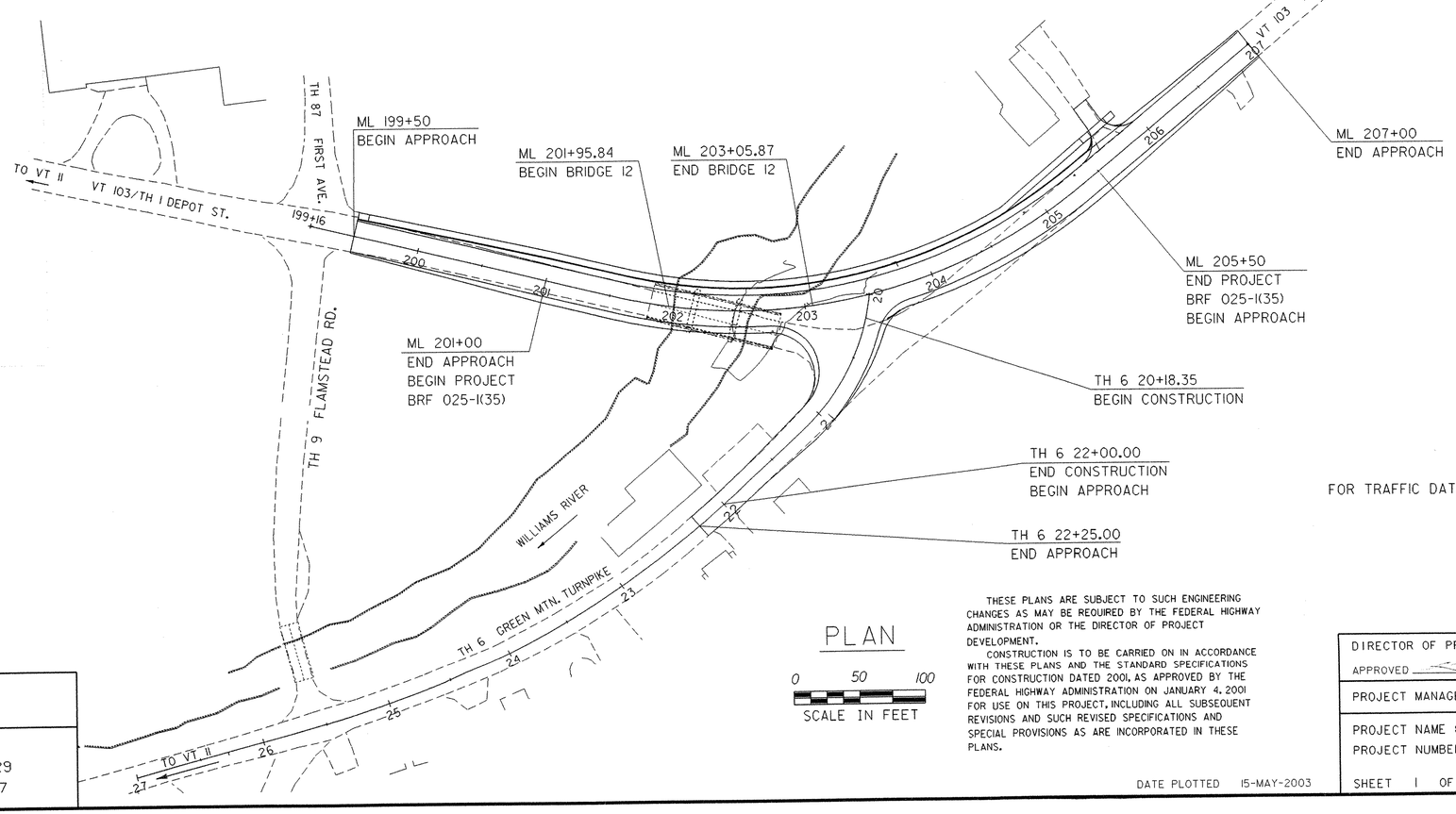
CHESTER BRF 025-1(35)

THIS PROJECT WILL BEGIN ON VT 103 IN THE TOWN OF CHESTER APPROXIMATELY 3.807 MILES NORTH OF THE ROCKINGHAM - CHESTER TOWN LINE AND EXTEND NORTHEASTERLY 450' TO MM 3.892.
WORK TO BE PERFORMED INCLUDES REPLACEMENT OF BR 12 ON VT 103 AND IMPROVEMENT OF INTERSECTIONS, BRIDGE APPROACHES, GUARDRAILS, GRADING, DRAINAGE, AND SUBBASES.

| | | |
|---|---|---|
| LENGTH OF BRIDGE 12 | 110.03 FEET= | 0.021 MILES |
| LENGTH OF ROADWAY | 339.97 FEET= | 0.064 MILES |
| LENGTH OF PROJECT | 450.00 FEET= | 0.085 MILES |




# PROPOSED IMPROVEMENT
# TOWN OF CHESTER
# COUNTY OF WINDSOR
# VT. ROUTE 103 - TH 1
## PRINCIPAL ARTERIAL ON THE NATIONAL HIGHWAY SYSTEM
## CLASS I TOWN HIGHWAY




FOR TRAFFIC DATA, SEE PAGE 3

PLAN
0 50 100
SCALE IN FEET

RECORD PLANS

CONTRACTOR: FW WHITCOMB CONSTRUCTION CORP. – WALPOLE, NH
RESIDENT ENGINEER: WILL STODDARD
CONSTRUCTION BEGAN: AUGUST 11, 2003
CONSTRUCTION COMPLETE: JUNE 1, 2005
RECORD PLANS BY: WILL STODDARD & JUDY. GILMORE

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

BY _____ RESIDENT ENGINEER
DATE 5-24-07

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

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
TOP OF CUT
TOE OF SLOPE

SURVEYED BY : SHERIDAN
SURVEYED DATE : 8/90

DATUM
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROJECT DEVELOPMENT.
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JANUARY 4, 2001 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

DATE PLOTTED 15-MAY-2003

DIRECTOR OF PROJECT DEVELOPMENT
APPROVED _____ DATE 5/16/03
PROJECT MANAGER : A. PORTALUPI
PROJECT NAME : CHESTER
PROJECT NUMBER : BRF 025-I(35)
SHEET 1 OF 79 SHEETS

# INDEX OF SHEETS

VAOT STANDARDS

| | | |
|---|---|---|
| B-5 | SLOPE GRADING, EMBANKMENTS, MUCK | 6/1/94 |
| B-11 | UNDERDRAIN - ROCK SUBGRADE, SLOPE STABILIZ. | 6/1/94 |
| B-71 | RESIDENTIAL AND COMMERCIAL DRIVES | 11/16/00 |
| C-1 | CURBS, BITUMINOUS CONCRETE SIDEWALKS | 1/3/00 |
| C-2A | CEMENT CONCRETE SIDEWALK, CONCRETE CURB | 1/3/00 |
| C-2B | CEMENT CONCRETE SIDEWALK, GRANITE CURB | 1/3/00 |
| D-2 | UNDERDRAIN & CARRIER PIPE CONSTRUCTION DETAILS | 6/1/94 |
| D-4 | UNDERDRAIN FLUSHING BASIN, END SECTION | 6/1/94 |
| D-9 | REINFORCED CONCRETE DROP INLET W/ VERTICAL CURB | 6/1/94 |
| D-15 | PRCP DI W/CAST IRON GRATE ,TYPE D | 6/1/94 |
| E-100 | CONSTRUCTION APPROACH SIGNS | 1/6/97 |
| E-101 | CONSTRUCTION SIGN DETAILS | 3/10/97 |
| E-102 | CONSTRUCTION SIGN DETAILS | 8/8/95 |
| E-106 | TRAFFIC CONTROL - MISCELLANEOUS DETAILS | 8/8/95 |
| E-107 | DELINEATION, BARRICADES AND DETOURS FOR CONSTRUCTION AREAS | 8/8/95 |
| E-107A | BREAKAWAY BARRICADE DETAILS | 8/8/95 |
| E-108 | CONSTRUCTION ZONE LONGITUDINAL DROP OFFS | 8/18/95 |
| E-121 | STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD | 8/8/95 |
| E-123 | GUIDE SIGN PLACEMENT MISCELLANEOUS DETAIL | 8/8/95 |
| E-136B | STATE ROUTE MARKER SIGN DETAILS | 8/8/95 |
| E-141 | REGULATORY SIGN DETAILS | 9/20/95 |
| E-143 | REGULATORY SIGN DETAILS | 9/20/95 |
| E-160 | FLANGED CHANNEL STEEL SIGN POST | 5/20/99 |
| E-164 | SQUARE STEEL SIGN POST | 5/20/99 |
| E-191 | PAVEMENT MARKING DETAILS | 2/1/99 |
| E-193 | PAVEMENT MARKING DETAILS | 8/18/95 |
| G-1D | STEEL BEAM GUARDRAIL (40MPH & LESS) | 1/3/00 |
| G-18 | PRECAST CONCRETE TEMPORARY TRAFFIC BARRIER | 6/1/94 |
| J-3 | MAILBOX SUPPORT DETAILS | 8/7/95 |
| T-1 | TEMPORARY EROSION CONTROL DETAILS | 6/1/94 |
| T-2 | TEMPORARY EROSION CONTROL DETAILS | 6/1/94 |
| SB-R6-82 | BRIDGE RAILING - HEAVY DUTY STEEL BEAM | 1/6/95 |
| SB-R7-90 | BRIDGE RAILING - HEAVY DUTY STEEL BEAM | 1/11/95 |


| | |
|---|---|
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| 2 | INDEX OF SHEETS |
| 3 | PI SHEET |
| 4 | VT 103 TYPICAL SECTION SHEET |
| 5 | TH 6 TYPICAL SECTION SHEET |
| 6-10 | QUANTITY SHEETS |
| 11 | ITEM DETAIL AND DRAINAGE SHEET |
| 12 | BRIDGE QUANTIY SHEET |
| 13 | EARTHWORKS SHEET |
| 14-16 | R.O.W. LAYOUT SHEETS |
| 17-18 | R.O.W. PROPERTY TABLES |
| 19 | HORIZONTAL ALIGNMENT SHEET |
| 20 | TIE SHEET |
| 21-23 | PLAN SHEETS |
| 24-25 | VT 103 PROFILE SHEETS |
| 26 | TH 6 PROFILE SHEETS |
| 27 | VT 103 BANKING & MATERIAL TRANSITION SHEETS |
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| 29 | SHOULDER TRANSITION SHEETS |
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| 45 | EROSION CONTROL DETAIL SHEETS |
| 46 | BORING LAYOUT SHEET |
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| 50 | GENERAL NOTES |
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| 64 | WINGWALLS 1, 2, 3, 4 |
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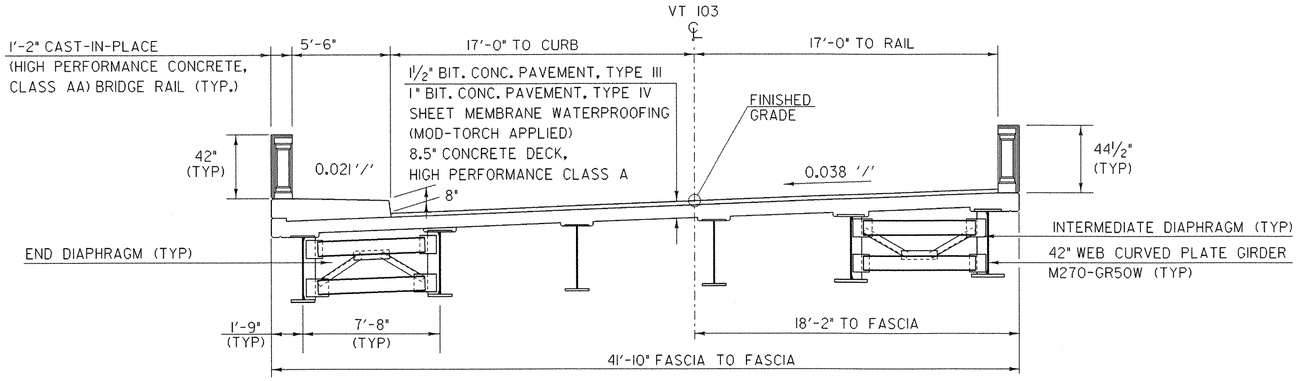
| 67 | REINFORCING SCHEDULE SHEET |
| 68-69 | CONCRETE BRIDGE RAIL DETAIL SHEETS |
| 70-73 | VT 103 CROSS SECTIONS |
| 74 | TH 6 CROSS SECTIONS |
| 75-79 | CHANNEL LINE #1 CROSS SECTIONS |

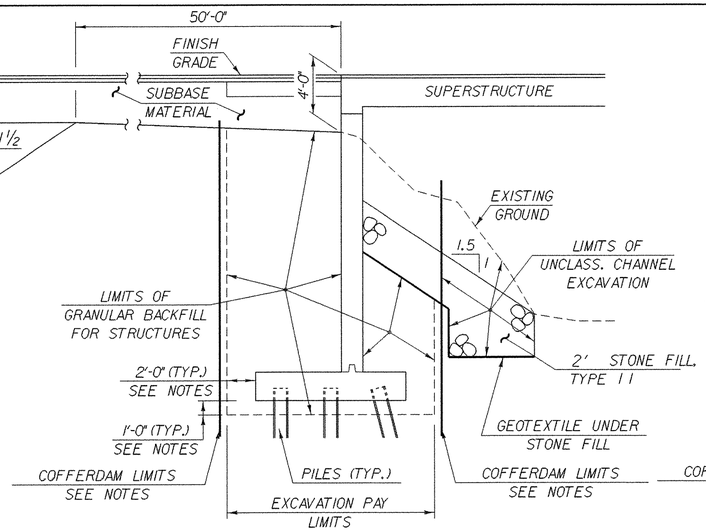

**DATUM**
VERTICAL N/A
HORIZONTAL N/A

| | |
|---|---|
| PROJECT: CHESTER | PROJECT NO.: BRF 025-1(35) |
| DESIGN FILE NAME: M:\ 1549100 VAOT Chester Curv\HWY\DRAW\zfi34frm.dgn | |
| IPARM FILE NAME: zfi34ind.i | PLOT DATE: 28-MAY-2003 |
| SURVEYED BY: L. BULLOCK | SURVEY DATE: |
| SQUAD LEADER: PORTALUPI | DRAWN BY: 6/93 |
| | SHEET: 2 OF 79 |



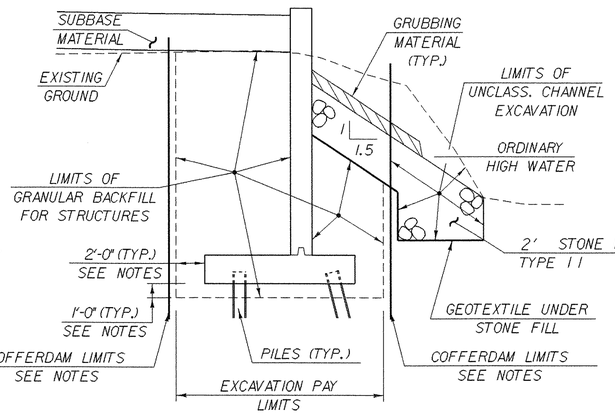

## TYPICAL BRIDGE SECTION

¼" = 1'-0"




## TYPICAL ABUTMENT SECTION

**(NOT TO SCALE)**

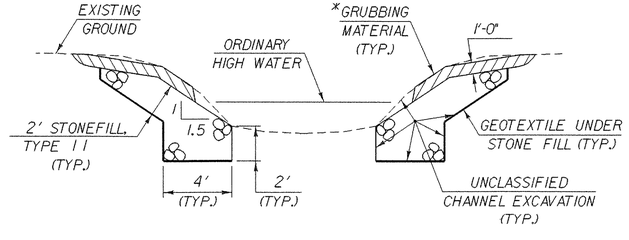



## TYPICAL WINGWALL SECTION

**(NOT TO SCALE)**

## NOTES

1. COFFERDAM LIMITS TO BE DETERMINED BY THE CONTRACTOR.
2. THE PAY LIMITS OF "COFFERDAM EXCAVATION, EARTH" AND "COFFERDAM EXCAVATION, ROCK" SHALL BE 2'-0" OUTSIDE THE PERIMETER OF THE FOOTING, UP TO EXISTING GROUND OR BOTTOM OF SUBBASE, WHICHEVER IS LOWER.
3. ONE FOOT UNDERCUT AS DETERMINED NECESSARY BY THE RESIDENT ENGINEER.
4. IF A COFFERDAM IS CONSTRUCTED WHICH IS LARGER THAN THE INDICATED COFFERDAM EXCAVATION PAY LIMITS, PAYMENT FOR ALL UNCLASSIFIED CHANNEL EXCAVATION, INCLUDING THAT PORTION WHICH IS INSIDE THE COFFERDAM BUT OUTSIDE THE COFFERDAM EXCAVATION PAY LIMITS, WILL BE MADE AT THE CONTRACT UNIT PRICE FOR UNCLASSIFIED CHANNEL EXCAVATION.




## TYPICAL CHANNEL SECTION

**(NOT TO SCALE)**

*GRUBBING MATERIAL SHALL NOT BE PLACED ON THE STONE FILL IN THE AREA UNDER THE BRIDGE. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.

# FINAL HYDRAULICS REPORT

## HYDROLOGIC DATA

(Dated 4-30-98)

DRAINAGE AREA= 27 SQ MI
CHARACTER OF TERRAIN: LOW ROLLING HILLS
CHARACTER & TYPE OF STREAM: STRAIGHT - PERRENIAL

NATURE OF STREAMBED: GRAVEL AND COBBLE

Q2.33= 1 200 CFS  Q50= 4 800 CFS
Q10= 3 000 CFS  Q100= 5 600 CFS
Q25= 4 000 CFS  Q500= 8 200 CFS

DATE OF FLOOD OF RECORD: 1938
WATER SURFACE ELEV.: NA  ESTIMATED DISCHARGE: NA
NATURAL STREAM VELOCITY @ Q50 = 8.5 FPS
ICE CONDITIONS: MODERATE  DEBRIS: MODERATE
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEVATION RAPIDLY? NO
IS ORDINARY RISE RAPID? NO
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? YES
IF YES, DESCRIBE. DOWNSTEAM STRUCTURE - CHESTER B63 ON TH9

WATERSHED STORAGE 1% HEADWATERS  UNIFORM THROUGHOUT WATERSHED X
IMMEDIATELY ABOVE SITE

## EXISTING STRUCTURE

STRUCTURE TYPE: THREE-SPAN T-BEAM  YEAR BUILT: 1931
CLEAR SPAN (NORMAL TO STREAM): 3 X 29 FT EACH = 87 FT TOTAL
VERTICAL CLEARANCE ABOVE STREAMBED: 12 FT
WATERWAY OF FULL OPENING: 650 SQ FT
DISPOSITION OF STRUCTURE: REMOVE

TYPE OF MATERIAL UNDER SUBSTRUCTURE: NA

WATER SURFACE ELEV. @ Q2.33= 586.4  VELOCITY= 3.8 FPS
Q10= 589.7  " = 6.0
Q25= 590.8  " = 7.4
Q50= 591.5  " = 8.5
Q100= 592.2  " = 9.7

LONG TERM STREAM BED CHANGES: NONE NOTED

IS THE ROADWAY OVERTOPPED BELOW THE Q100? YES  FREQUENCY: LESS Q10
RELIEF ELEVATION: 588.6  DISCHARGE OVER ROAD @ Q100: 700 CFS

UPSTREAM STRUCTURE: TOWN: CHESTER  DISTANCE: 3 000 FT
HIGHWAY NO.: TH 5  STRUCTURE NO.: B 11
STRUCTURE TYPE: TWO-SPAN I-BEAM
CLEAR SPAN: 31 FT  CLEAR HEIGHT: 9 FT
YEAR BUILT: 1940  FULL WATERWAY: 280 SQ FT

DOWNSTRUCTURE: TOWN: CHESTER  DISTANCE: 450 FT
HIGHWAY NO.: TH 9  STRUCTURE NO.: B 63
STRUCTURE TYPE: CONCRETE/STEEL I-BEAM
CLEAR SPAN: 32 FT  CLEAR HEIGHT: 9 FT
YEAR BUILT: NA  FULL WATERWAY: 280 SQ FT

## PROPOSED STRUCTURE

STRUCTURE TYPE: SINGLE-SPAN CURVED PLATE GIRDER

CLEAR SPAN (NORMAL TO STREAM): 90 FT
VERTICAL CLEARANCE ABOVE STREAMBED: 14 FT
WATERWAY OF FULL OPENING: 1 000 SQ FT

WATER SURFACE ELEV. @ Q2.33= 586.3  VELOCITY= 3.8 FPS
Q10= 589.4  " = 5.8
Q25= 590.4  " = 6.9
Q50= 591.1  " = 7.9
Q100= 591.8  " = 8.9

IS THE ROADWAY OVERTOPPED BELOW THE Q100? YES  FREQUENCY: LESS Q10
RELIEF ELEVATION: 588.5  DISCHARGE OVER ROAD @ Q100: 520 CFS

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 594.0 FT (LOW END =592.6)
VERTICAL CLEARANCE @ Q100 = 2.2 FT AVERAGE (0.8 ON LOW END)

SCOUR: CONTRACTION Q100 = 4 FT  Q500 = 6FT
REQUIRED CHANNEL PROTECTION: TYPE II STONE FILL

## PERMIT INFORMATION

AVERAGE DAILY FLOW: 55 CFS
ORDINARY LOW WATER: 26 CFS  DEPTH: 1 FT
ORDINARY HIGH WATER: 515 CFS  DEPTH: 4 FT

## TEMPORARY BRIDGE REQUIREMENTS

TEMPORARY STRUCTURE TYPE: Single span bridge at the location shown on the plans. Temp bridge length exceeds hydraulic requirements due to need to avoid sensitive area.
VERTICAL CLEARANCE ABOVE STREAMBED: Bottom of steel min elev. = 591.0'
WATERWAY OF FULL OPENING: 560 sq ft min, perpendicular to channel

DESIGN CRITERIA:
1. DESIGN LIVE LOAD AASHTO HS25-44
2. DESIGN SPAN 107.00 FT.
3. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL 6 KSF  ON LEDGE NA
4. ALLOWABLE LOAD FOR PILING 190 KIPS  TYPE HP14 X 73 (GR 50)  ESTIMATED LENGTH 25 FT
5. STRUCTURAL STEEL AASHTO GRADE M 270 Grade 50W  27 KSI
6. REINFORCING STEEL GRADE 60
7. CONCRETE, HIGH PERFORMANCE CLASS A  f'c : 4000 PSI
   CONCRETE, HIGH PERFORMANCE CLASS B  f'c : 3500 PSI
8. SOIL UNIT WEIGHT 140 PCF
9. DESIGN LOAD FOR SPREAD FOOTINGS ON SOIL N/A

TRAFFIC MAINTENANCE:
1. IS TRAFFIC TO BE MAINTAINED? YES  IF YES, ON EXISTING STRUCTURE NO  OR ON TEMPORARY BRIDGE OF EXISTING IMMEDIATELY DOWNSTREAM
2. TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY TWO WAY  TRAFFIC CONTROL SIGNALS REQUIRED NO
   MINIMUM
   ARE SIDEWALKS REQUIRED? NO  IF SO, ON WHAT SIDE?

## LOAD FACTOR LOAD RATING (TONS)

| LOADING LEVELS (LOAD FACTOR) | TRUCK | | | | | | |
|---|---|---|---|---|---|---|---|
| | H | HS | 3S2 | 6 AXLE | 3A. STR. | 4A. STR. | 5A. SEMI |
| INVENTORY A=2.17; B=1.00 | 36 | 50 | — | — | — | — | — |
| POSTED A=1.55; B=1.40 | 50 | 70 | 81 | — | 64 | 66 | 75 |
| OPERATING A=1.30; B=1.67 | — | 83 | 97 | 114 | 76 | 78 | — |

STRENGTH RF = $\frac{\phi M_N - 1.3\,M_{DL}}{A \times M_{LL+I}}$  SERVICEABILITY RF = $B\left[\frac{.95\,F_y\,S_{LL+I} - M_{DL}\frac{S_{LL+I}}{S_{DL}} - M_{SDL}\frac{S_{LL+I}}{S_{SDL}}}{1.67\,M_{LL+I}}\right]$

TRAFFIC DATA
VT 103 BR 12

2002 ADT 4,420 VPD  D% 53 %
2022 ADT 5,910 VPD  T% 12 %
2002 ADTT 805 VPD  DESIGN SPEED 30 MPH
2022 ADTT 1,240 VPD  18 KIP ESALS (2 LANES)
2022 DHV 760 VPH  20 YR - 10,260,000
40 YR - 26,986,000

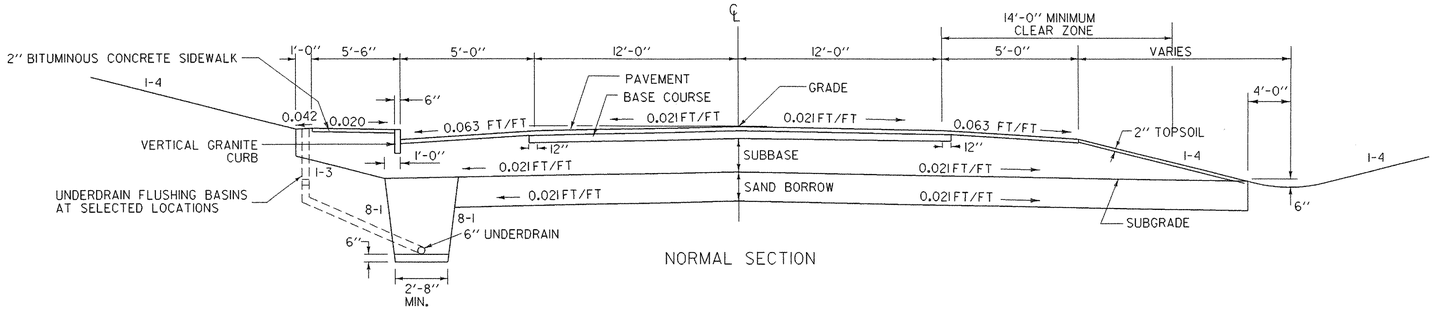
# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. 202-50 |
| VT 103 OVER THE WILLIAMS RIVER | |
| PRELIMINARY INFORMATION | |
| Designed By THL / LKW | Drawn By THL / PBD |
| Checked By TLG  Date 10/00 | Bridge Design Supervisor NAP  Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. /user/str2/87bl34/zbl34cpl.dgn | zbl34cpl.j |
| Bridge Sheet No. BRI00 | Sheet 3 of 79 |

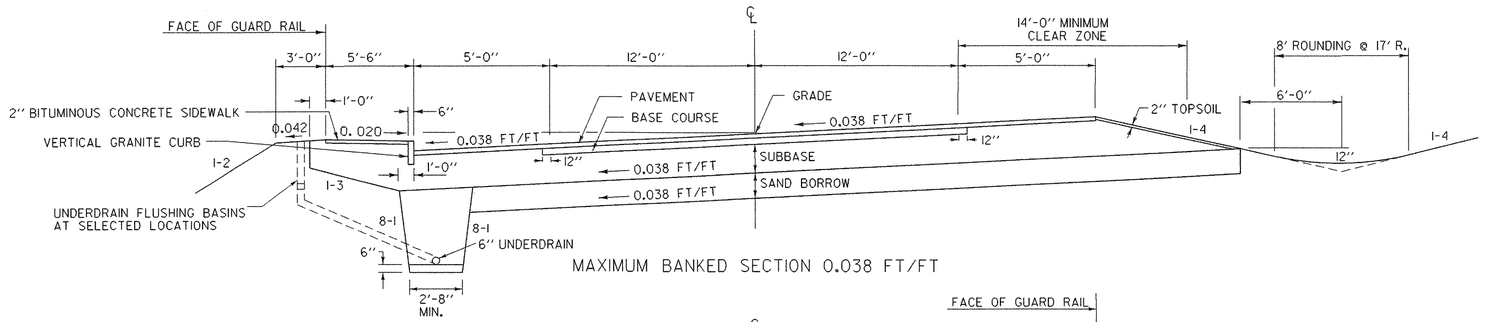
# VT. RTE. 103
# TYPICAL SECTIONS

| MATERIAL ITEM | THICKNESS TOLERANCE |
|---|---|
| PAVEMENT (TOTAL DEPTH) | ± 1/4" |
| SUBBASE | ± 1" |
| SAND BORROW | ± 1" |

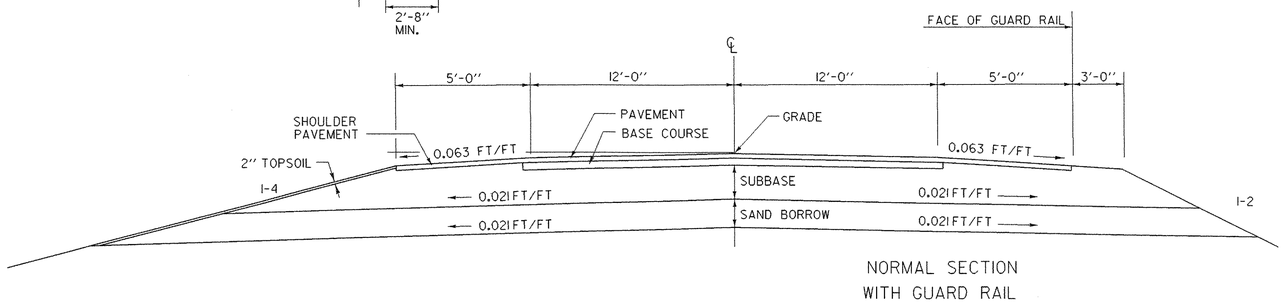
1 1/2" BITUMINOUS CONCRETE PAVEMENT, TYPE III
2" BITUMINOUS CONCRETE PAVEMENT, TYPE II
4" BITUMINOUS CONCRETE PAVEMENT, TYPE I
24" SUBBASE OF DENSE GRADED CRUSHED STONE
22" SAND BORROW
SHOULDER: 1 1/2" BITUMINOUS CONCRETE PAVEMENT, TYPE III
2" BITUMINOUS CONCRETE PAVEMENT, TYPE II




NORMAL SECTION




MAXIMUM BANKED SECTION 0.038 FT/FT




NORMAL SECTION
WITH GUARD RAIL

NOT TO SCALE (TYP)

## SEEDING FORMULA
## URBAN AREAS

| % WT. | LBS./A. | NAME | PUR % | GERM % |
|---|---|---|---|---|
| 42.5 | 38.25 | CREEPING RED FESCUE | 98 | 85 |
| 10.0 | 9.0 | PERENNIAL RYE GRASS | 95 | 90 |
| 42.5 | 38.25 | KENTUCKY BLUE GRASS | 85 | 85 |
| 5.0 | 4.5 | ANNUAL RYE GRASS | 95 | 85 |
| 100.00 | 90.0 | | | |

### GENERAL NOTES

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

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

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

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

HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

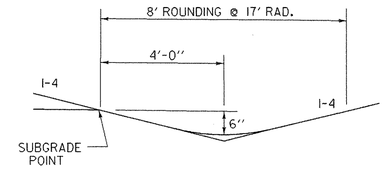
TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

MARKER POSTS: TO BE PLACED AS INDICATED OR AS DIRECTED BY THE ENGINEER.

SLOPE ROUNDING: ALL CUT SLOPES TO BE ROUNDED IN ACCORDANCE WITH STANDARD SHEET B-5.

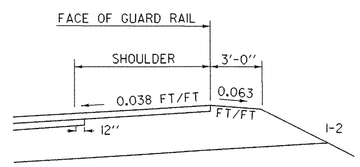
PAY LIMITS OF SAND BORROW: WHEN USED IN CONJUNCTION WITH UNDERDRAIN - SEE STANDARD SHEET D - 2.

TACK COAT: EMULSIFIED ASPHALT IS TO BE APPLIED AT THE RATE OF 0.015 GAL/SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT AS DIRECTED BY THE ENGINEER.

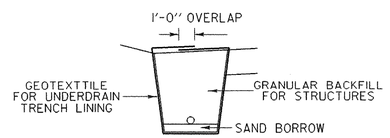



TYPICAL DITCH DETAILS

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




DETAIL OF GUARD RAIL ON HIGH SIDE OF BANKED SECTION




UNDERDRAIN DETAIL

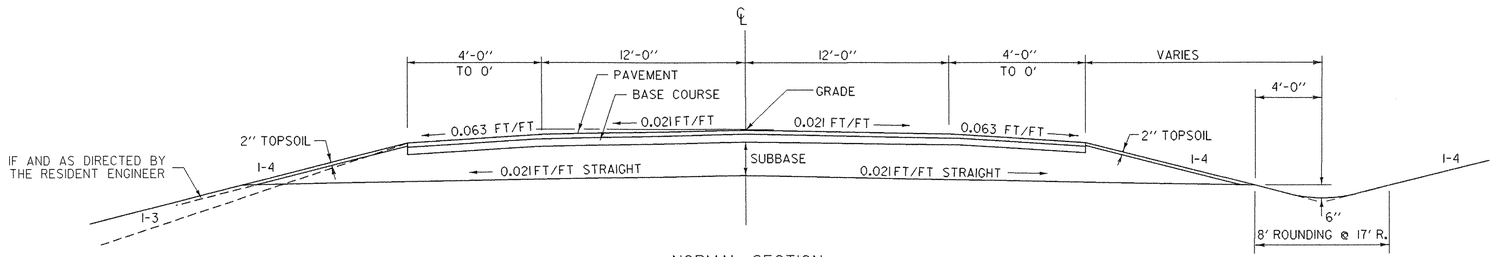
| | | | |
|---|---|---|---|
| SURVEYED BY | SHERIDAN | DATE | 8-90 |
| DRAWN BY | L. BULLOCK | DATE | 4-92 |
| SQUAD LEADER | PORTALUPI | | |
| DESIGN FILE NO. | M:\ 1549100 VAOT Chester Curv \HWY\DRAW\zf134frm.dgn | | |
| IPARM NAME | zf134tyl.i | DATE PLOTTED | 28-MAY-2003 |
| PROJ. NAME | CHESTER | | |
| PROJ. NO. | BRF025-1(35) | | |
| SHEET | 4 OF 79 SHEETS | | |

# TH #6
# TYPICAL SECTIONS

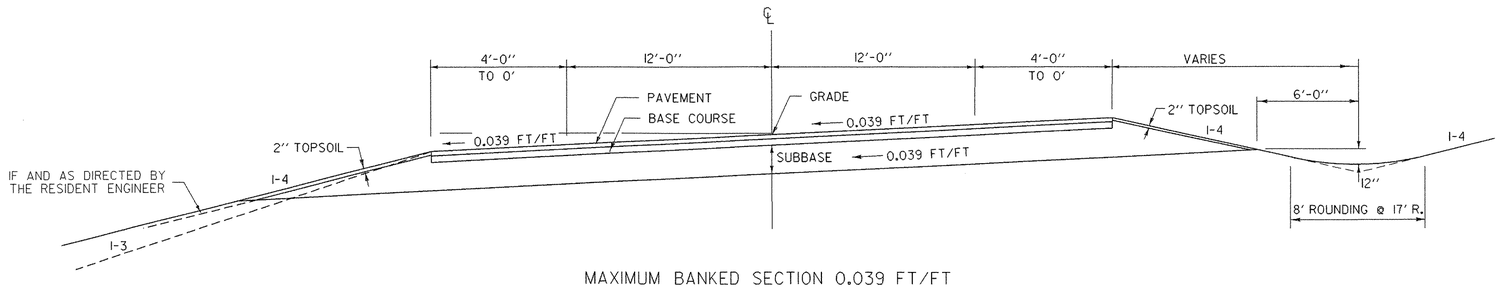
## STATION 20+18 - 22+25

| MATERIAL ITEM | THICKNESS TOLERANCE |
|---|---|
| PAVEMENT (TOTAL DEPTH) | ± 1/4" |
| SUBBASE | ± 1" |

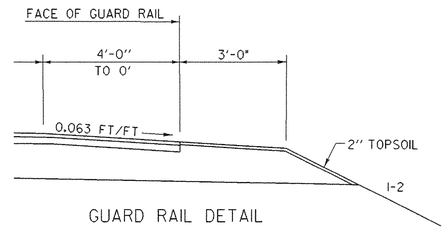
1 1/2" BITUMINOUS CONCRETE PAVEMENT, TYPE III
2" BITUMINOUS CONCRETE PAVEMENT, TYPE II
12" SUBBASE OF DENSE GRADED CRUSHED STONE



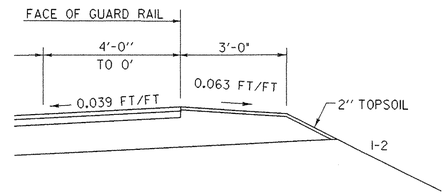

NORMAL SECTION




MAXIMUM BANKED SECTION 0.039 FT/FT




GUARD RAIL DETAIL
ON NORMAL SECTION




GUARD RAIL DETAIL
ON BANKED SECTION

NOT TO SCALE

| | | | |
|---|---|---|---|
| SURVEYED BY | SHERIDAN | DATE | 8-90 |
| DRAWN BY | L. BULLOCK | DATE | 4-92 |
| SQUAD LEADER | PORTALUPI | | |
| DESIGN FILE NO. | M:\ 1549100 VAOT Chester Curv \HWY\DRAW\zf134frm.dgn | | |
| IPARM NAME | zf134ty2.i | DATE PLOTTED | 28-MAY-2003 |
| PROJ. NAME | CHESTER | | |
| PROJ. NO. | BRF025-1(35) | | |
| SHEET | 5 OF 79 SHEETS | | |

# QUANTITY SHEET

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

BRF 025-1(35)

APPROXIMATE SUMMARY OF QUANTITIES

| FULL E&C | TRAINEESHIP | EROSION CONTROL | TEMPORARY EROSION CONTROL | BRIDGE | ROADWAY | TOTAL | UNIT | ITEMS | ITEM NO. | ROUNDING |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 1 | LS | CLEARING AND GRUBBING ( PLUS INDIVIDUAL TREES AND STUMPS ) | 201.10 | EST. |
| | | | | | 2300 | 2300 | CY | COMMON EXCAVATION | 203.15 | 8 |
| | | | | | 75 | 75 | CY | SOLID ROCK EXCAVATION | 203.16 | EST. |
| | | | | 1305 | | 1305 | CY | UNCLASSIFIED EXCAVATION | 203.17 | |
| | | | | | 50 | 50 | CY | EXCAVATION OF SURFACES AND PAVEMENTS | 203.28 | 3.9 |
| | | | | | 1240 | 1240 | CY | SAND BORROW | 203.31 | 7 |
| | | | | | 3490 | 3490 | SY | FINE GRADING - SUBGRADE | 203.40 | 16 |
| | | | 25 | | 214 | 239 | CY | TRENCH EXCAVATION OF EARTH | 204.20 | 11 |
| | | | | 480 | | 480 | CY | GRANULAR BACKFILL FOR STRUCTURES | 204.30 | |
| | | | | 850 | | 850 | CY | COFFERDAM EXCAVATION, EARTH | 208.30 | |
| | | | | 150 | | 150 | CY | COFFERDAM EXCAVATION, ROCK | 208.35 | |
| | | | | 1 | | 1 | LS | COFFERDAM (STA. 201+80) | 208.40 | |
| | | | | 1 | | 1 | LS | COFFERDAM (STA. 203+25) | 208.40 | |
| | | | | | 390 | 390 | SY | COLD PLANING-BIT. PAVEMENT | 210.10 | 12 |
| | | | | | 9 | 9 | CY | SUBBASE OF CRUSHED GRAVEL ( FINE GRADED ) | 301.26 | |
| | | | 90 | | 2600 | 2690 | CY | SUBBASE OF DENSE GRADED CRUSHED STONE | 301.35 | 20 |
| | | | | | 6 | 6 | CWT | EMULSIFIED ASPHALT | 404.65 | 0.7 |
| | | | | 88 | 1050 | 1138 | TON | BITUMINOUS CONCRETE PAVEMENT (PG 58-28) | 406.25 | 15 |
| | | | | 180 | | 180 | CY | CONCRETE, HIGH PERFORMANCE CLASS A | 501.33 | |
| | | | | 518 | | 518 | CY | CONCRETE, HIGH PERFORMANCE CLASS B | 501.34 | 1 |
| | | | | 1 | | 1 | LS | FURNISHING EQUIPMENT FOR DRIVING PILING | 504.10 | |
| | | | | 1720 | | 1720 | LF | STEEL PILING (HP14 X 73) | 505.17 | |
| | | | | 190,000 | | 190,000 | LB | STRUCTURAL STEEL (PLATE GIRDER) | 506.55 | |
| | | | | 32,315 | | 32,315 | LB | REINFORCING STEEL | 507.15 | |
| | | | | 57,042 | | 57,042 | LB | EPOXY COATED REINFORCING STEEL | 507.17 | |
| | | | | 1 | | 1 | LS | SHEAR CONNECTORS (1392 -7/8" DIA. X7") | 508.15 | |

PROJECT: CHESTER

PROJECT NO.: BRF 025-1(35)

DESIGN FILE NAME: M:\ 1549100 VAOT-Chester Curv\HWY\DRAW\zf134frm.dgn
IPARM FILE NAME: zf134qsl.i
SURVEYED BY: SHERIDAN
SQUAD LEADER: PORTALUPI
PLOT DATE: 02-JUN-2003
SURVEY DATE: 8/90
DRAWN BY: L. BULLOCK
SHEET: 6 OF 79

# QUANTITY SHEET

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

BRF 025-1(35)

APPROXIMATE SUMMARY OF QUANTITIES

| FULL E&C | TRAINEESHIP | EROSION CONTROL | TEMPORARY EROSION CONTROL | BRIDGE | ROADWAY | TOTAL | UNIT | ITEMS | ITEM NO. | ROUNDING |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | | 1 | LS | STRUCTURAL PAINTING, SHOP APPLIED (6T) | 513.25 | |
| | | | | 1 | | 1 | LS | SURFACE PREPARATION, SHOP | 513.40 | |
| | | | | 43 | | 43 | GAL | WATER REPELLENT | 514.10 | 0.5 |
| | | | | 60 | | 60 | LF | BRIDGE EXPANSION JOINT | 516.10 | |
| | | | | 636 | | 636 | SY | SHEET MEMBRANE WATERPROOFING (MOD - TORCH APPLIED) | 519.20 | |
| | | | | 37 | | 37 | LF | JOINT SEALER, HOT POURED | 524.11 | |
| | | | | 271 | | 271 | LF | CAST-IN-PLACE CONCRETE BRIDGE RAIL | 525.50 | |
| | | | | 1 | | 1 | LS | TWO-WAY TEMPORARY BRIDGE | 528.11 | |
| | | | | 280 | | 280 | SY | REMOVAL OF BRIDGE PAVEMENT | 529.10 | |
| | | | | 1 | | 1 | EA | REMOVAL OF STRUCTURE | 529.15 | |
| | | | | 12 | | 12 | EA | BEARING DEVICE ASSEMBLY (GIRDERS) | 531.10 | |
| | | | | 1 | | 1 | EA | BEARING DEVICE ASSEMBLY (DECK) | 531.10 | |
| | | | | | | | | ** BEGIN OPTION PIPES ** | | |
| | | | | | 90 | 90 | LF | 18'' PCCSP .064 (2 2/3 X 1/2) | 601.0415 | |
| | | | | | 90 | 90 | LF | 18'' CAAP .060 (2 2/3 X 1/2) | 601.0215 | |
| | | | | | 90 | 90 | LF | 18'' RCP CL III | 601.0815 | |
| | | | | | 90 | 90 | LF | 18'' CPEP (SL) | 601.2615 | |
| | | | | | 3 | 3 | EA | 18'' CSPES .064 (2 2/3 X 1/2) | 601.6015 | |
| | | | | | 3 | 3 | EA | 18'' CAAPES .060 (2 2/3 X 1/2) | 601.6215 | |
| | | | | | 3 | 3 | EA | 18'' RCPES CL III | 601.6815 | |
| | | | | | 3 | 3 | EA | 18'' CPEPES (SL) | 601.7015 | |
| | | | | | | | | ** END OPTION PIPES ** | | |
| | | | | | 3 | 3 | EA | PRCP DI W/CAST IRON GRATE (MOD) | 604.25 | |
| | | | | | 2 | 2 | EA | CHANGING ELEV. OF DROP INLETS, CATCH BASINS OR MANHOLES | 604.40 | EST. |
| | | | | | 1 | 1 | EA | REHABILITATING DROP INLETS, CATCH BASINS OR MANHOLES, CLASS 1 | 604.412 | EST. |
| | | | | | 2 | 2 | EA | CHANGING ELEVATION OF SEWER MANHOLE | 604.42 | EST. |
| | | | | | 225 | 225 | LF | 6'' UNDERDRAIN | 605.10 | EST. |
| | | | | | 50 | 50 | LF | 6'' UNDERDRAIN CARRIER PIPE | 605.20 | EST. |
| | | | | | 2 | 2 | EA | UNDERDRAIN FLUSHING BASINS | 605.95 | EST. |

PROJECT: CHESTER

PROJECT NO.: BRF 025-1(35)

DESIGN FILE NAME: M:\ 1549100 VAOT-Chester Curv\HWY\DRAW\zf134frm.dgn
IPARM FILE NAME: zf134qs2.i
SURVEYED BY: SHERIDAN
SQUAD LEADER: PORTALUPI
PLOT DATE: 04-JUN-2003
SURVEY DATE: 8/90
DRAWN BY: L. BULLOCK
SHEET: 7 OF 79

# QUANTITY SHEET

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

BRF 025-1(35)

APPROXIMATE SUMMARY OF QUANTITIES

| FULL E&C | TRAINEESHIP | EROSION CONTROL | TEMPORARY EROSION CONTROL | BRIDGE | ROADWAY | TOTAL | UNIT | ITEMS | ITEM NO. | ROUNDING |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 15 | 15 | HR | ROADWAY PATROL MAINTENANCE | 607.10 | EST. |
| | | | | | 2 | 2 | HR | BULLDOZER RENTAL, TYPE I | 608.10 | EST. |
| | | | | | 2 | 2 | HR | POWER GRADER RENTAL | 608.15 | EST. |
| | | | | | 4 | 4 | HR | ALL PURP. EXCAVATOR RENTAL, TYPE I | 608.25 | EST. |
| | | | | | 2 | 2 | HR | POWER BROOM RENTAL, TYPE II | 608.31 | EST. |
| | | | | | 4 | 4 | HR | TRUCK RENTAL | 608.37 | EST. |
| | | | | | 150 | 150 | MGAL | DUST CONTROL W/WATER | 609.10 | EST. |
| | | | | | 1 | 1 | TON | DUST AND ICE CONTROL W/CALC. CHLORIDE | 609.15 | EST. |
| | | | 35 | 2 | 2 | 39 | CY | STONE FILL, TYPE I | 613.10 | |
| | | | | 725 | | 725 | CY | STONE FILL, TYPE II | 613.11 | |
| | | | | | 460 | 460 | LF | CAST-IN-PLACE CONCRETE CURB, TYPE B | 616.28 | 5 |
| | | | | | 1 | 1 | EA | RELOCATE MAILBOX, SINGLE SUPPORT | 617.10 | - |
| | | | | | 30 | 30 | TON | BITUMINOUS CONCRETE SIDEWALK | 618.15 | 1 |
| | | | | | 5 | 5 | EA | STEEL MARKER POSTS | 619.16 | EST. |
| | | | | | 2 | 2 | EA | REMOVING AND RESETTING PROPERTY MARKERS | 619.20 | EST. |
| | | | | | 60 | 60 | LF | REMOVING AND RESETTING FENCE | 620.50 | 3 |
| | | | | | 275 | 275 | LF | STEEL BEAM GUARD RAIL | 621.20 | 11 |
| | | | | 100 | | 100 | LF | HEAVY DUTY STEEL BEAM GUARD RAIL | 621.21 | 5 |
| | | | | | 4 | 4 | EA | ANCHOR FOR STEEL BEAM RAIL | 621.60 | |
| | | | | | 260 | 260 | LF | REMOVAL AND DISPOSAL OF GUARD RAIL | 621.80 | 3 |
| | | | | | 1 | 1 | EA | ADJUST ELEVATION OF VALVE BOX | 629.20 | EST. |
| | | | | | 85 | 85 | HR | UNIFORMED TRAFFIC OFFICERS | 630.10 | EST. |
| | | | | | 195 | 195 | HR | FLAGGERS | 630.15 | EST. |
| 1 | | | | | | 1 | LS | FIELD OFFICE - ENGINEERS | 631.10 | - |
| 1 | | | | | | 1 | LS | TESTING EQUIPMENT - CONCRETE | 631.16 | - |
| 1 | | | | | | 1 | LS | TESTING EQUIPMENT - BITUMINOUS | 631.17 | - |
| 1 | | | | | | 1 | LS | TESTING EQUIPMENT - PROTECTIVE COATINGS | 631.18 | - |
| 1 | | | | | | 1 | LU | FIELD OFFICE TELEPHONE (N.A.B.I.) | 631.25 | - |
| | 520 | | | | | 520 | HR | EMPLOYEE TRAINEESHIP | 634.10 | EST. |
| | | | | | 1 | 1 | LS | MOBILIZATION | 635.10 | EST. |
| | | | | | 1 | 1 | LS | TRAFFIC CONTROL | 641.10 | EST. |

PROJECT: CHESTER

PROJECT NO.: BRF 025-1(35)

DESIGN FILE NAME: M:\ 1549100 VAOT-Chester Curv\HWY\DRAW\zf134frm.dgn
IPARM FILE NAME: zf134qs3.i
SURVEYED BY: SHERIDAN
SQUAD LEADER: PORTALUPI
PLOT DATE: 28-MAY-2003
SURVEY DATE: 8/90
DRAWN BY: L. BULLOCK
SHEET: 8 OF 79

# QUANTITY SHEET

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

BRF 025-I(35)

APPROXIMATE SUMMARY OF QUANTITIES

| FULL E&C | TRAINEESHIP | EROSION CONTROL | TEMPORARY EROSION CONTROL | BRIDGE | ROADWAY | TOTAL | UNIT | ITEMS | ITEM NO. | ROUNDING |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 470 | 470 | LF | 4'' WHITE LINE | 646.20 | 11 |
| | | | | | 2530 | 2530 | LF | 4'' YELLOW LINE | 646.21 | 18 |
| | | | | | 55 | 55 | LF | 24'' STOP BAR | 646.26 | 5 |
| | | | | | 4 | 4 | EA | LETTER OR SYMBOL | 646.30 | |
| | | | | | 1390 | 1390 | LF | DURABLE 4'' WHITE LINE | 646.40 | 18 |
| | | | | | 1440 | 1440 | LF | DURABLE 4'' YELLOW LINE | 646.41 | 20 |
| | | | | | 470 | 470 | LF | TEMPORARY 4'' WHITE LINE | 646.60 | 11 |
| | | | | | 400 | 400 | LF | TEMPORARY 4'' YELLOW LINE | 646.61 | 10 |
| | | | | | 80 | 80 | EA | LINE STRIPING TARGETS | 646.76 | EST. |
| | | | | 1070 | | 1070 | SY | GEOTEXTILE UNDER STONE FILL | 649.31 | |
| | | | | | 500 | 500 | SY | GEOTEXTILE FOR UNDERDRAIN TRENCH LINING | 649.41 | EST. |
| | | | 1050 | | | 1050 | SY | GEOTEXTILE FOR SILT FENCE | 649.51 | EST. |
| | | | 120 | | | 120 | SY | GEOTEXTILE FOR FILTER CURTAIN | 649.61 | EST. |
| | | 80 | | | | 80 | LB | SEED | 651.15 | EST. |
| | | | 4 | | | 4 | LB | SEED-WINTER RYE | 651.17 | EST. |
| | | 500 | | | | 500 | LB | FERTILIZER | 651.18 | EST. |
| | | 2 | | | | 2 | TON | AGRICULTURAL LIMESTONE | 651.20 | EST. |
| | | 1 | 1 | | | 2 | TON | HAY MULCH | 651.25 | EST. |
| | | | 50 | | | 50 | EA | HAY BALES FOR EROSION CONTROL | 651.26 | EST. |
| | | 135 | | | | 135 | CY | TOPSOIL | 651.35 | |
| | | | | 340 | | 340 | SY | GRUBBING MATERIAL | 651.40 | |
| | | | | | 1 | 1 | LS | EROSION & SEDIMENT CONTROL PLAN | 652.10 | |
| | | | | | 60 | 60 | HR | MONITORING ERO & SEDIMENT CONTROL PLAN | 652.20 | |
| | | | | | 1 | 1 | LU | FIELD MAINTENACE OF EROSION & SEDIMENTATION CONTROL PLAN (N.A.B.I) | 652.30 | |
| | | | 1700 | | | 1700 | SY | EROSION MATTING | 654.10 | EST. |
| | | | | | 31 | 31 | SF | TRAFFIC SIGNS, TYPE A | 675.20 | |
| | | | | | 66 | 66 | LF | FLANGED CHANNEL SIGN POST | 675.301 | |
| | | | | | 12 | 12 | EA | REMOVING SIGNS | 675.50 | |
| | | | | | 2 | 2 | EA | ERECTING SALVAGED SIGNS | 675.60 | |
| | | | | | 4 | 4 | EA | SETTING SALVAGED POSTS | 675.61 | |

PROJECT: CHESTER

PROJECT NO.: BRF 025-I(35)

DESIGN FILE NAME: M:\ 1549100 VAOT-Chester Curv\HWY\DRAW\zf134frm.dgn
IPARM FILE NAME: zf134qs4.i
SURVEYED BY: SHERIDAN
SQUAD LEADER: PORTALUPI
PLOT DATE: 28-MAY-2003
SURVEY DATE: 8/90
DRAWN BY: L.BULLOCK
SHEET: 9 OF 79

# DETAILED SUMMARY OF QUANTITY SHEET

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

DETAILED SUMMARY OF QUANTITIES

| QUANTITIES | UNIT | ITEMS |
|---|---|---|
| | | COMMON EXCAVATION, ITEM #203.15 |
| 2201 | CY | MAINLINE |
| 81 | CY | TH #6 |
| 10 | CY | DRIVES |
| 8 | CY | ROUNDING |
| 2300 | CY | TOTAL |
| | | SAND BORROW, ITEM #203.31 |
| 1233 | CY | MAINLINE |
| 7 | CY | ROUNDING |
| 1240 | CY | TOTAL |
| | | FINE GRADING-SUBGRADE, ITEM #203.40 |
| 2780 | SY | MAINLINE |
| 668 | SY | TH #6 |
| 26 | SY | DRIVES |
| 16 | SY | ROUNDING |
| 3490 | SY | TOTAL |
| | | TRENCH EXCAVATION OF EARTH, ITEM #204.20 |
| 132 | CY | DESIGNED DRAINAGE |
| 71 | CY | UNDERDRAIN |
| 25 | CY | TEMPORARY EROSION CONTROL |
| 11 | CY | ROUNDING |
| 239 | CY | TOTAL |
| | | COLD PLANING-BITUMINOUS PAVEMENT, ITEM #210.10 |
| 322 | SY | MAINLINE |
| 56 | SY | TH #6 |
| 12 | SY | ROUNDING |
| 390 | SY | TOTAL |
| | | SUBBASE OF DENSE GRADED CRUSHED STONE ITEM #301.35 |
| 2313 | CY | MAINLINE |
| 267 | CY | TH #6 |
| 90 | CY | TEMPORARY EROSION CONTROL |
| 20 | CY | ROUNDING |
| 2690 | CY | TOTAL |

DETAILED SUMMARY OF QUANTITIES

| QUANTITIES | UNIT | ITEMS |
|---|---|---|
| | | EMULSIFIED ASPHALT, ITEM #404.65 |
| 4.5 | CWT | MAINLINE |
| 0.8 | CWT | TH #6 |
| 0.7 | CWT | ROUNDING |
| 6 | CWT | TOTAL |
| | | BITUMINOUS CONCRETE PAVEMENT ITEM #406.25 |

| QUANTITIES | UNIT | ITEMS | TYPE III | II | I |
|---|---|---|---|---|---|
| 711 | TON | MAINLINE | 176 | 218 | 317 |
| 200 | TON | DETOUR (SEE NOTE) | | 200 | |
| 122 | TON | TH #6 | 55 | 67 | |
| 2 | TON | DRIVES | 2 | | |
| 15 | TON | ROUNDING | | | |
| 1050 | TON | TOTAL | | | |

NOTE: SEE NOTE 30 ON SHEET 50 OF 79

DETAILED SUMMARY OF QUANTITIES

| QUANTITIES | UNIT | ITEMS |
|---|---|---|

DETAILED SUMMARY OF QUANTITIES

| QUANTITIES | UNIT | ITEMS |
|---|---|---|

| | |
|---|---|
| PROJECT: CHESTER | PROJECT NO.: BRF 025-1(35) |
| DESIGN FILE NAME: M:\ 154900 VAOT-Chester Curv\HWY\DRAW\zf134frm.dgn | |
| IPARM FILE NAME: zf134qs5.1 | PLOT DATE: 04-JUN-2003 |
| SURVEYED BY: SHERIDAN | SURVEY DATE: 8/90 |
| SQUAD LEADER: PORTALUPI | DRAWN BY: L. BULLOCK |
| | SHEET: 10 OF 79 |

# ITEM DETAIL AND DRAINAGE SHEET

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

## DRAINAGE STRUCTURES

| STA. | STA. | POSITION | ASKEW | TYPE IN/OUT | DITCH IN | DITCH OUT | PIPE ARCH S IN | PIPE ARCH R IN | PIPE ARCH L FT | PIPE D IN | PIPE L FT | ALLOWABLE OPTIONS PCCSP TH | CAAP TH | RCP CL | CSP TH | CPEP SL | PCCSP FI TH | PIPE ELBOW NO-DEG | ES EA | CB | PROJECT | DEPTH DI | CONC CL B CY | REIN STEEL LBS | DI GRATE TYPE | CHAN ELEV | CRM CY | TR EXCAV EARTH CY | TR EXCAV ROCK CY | COMM EXC CY | UNC CHAN EXC CY | STRUC EXCAV CY | GRAN BKF STRUC CY | GRAN BORR CY | EROS MATT SY | STONE FILL CY | STONE FILL TYPE | MRKR POSTS LT | MRKR POSTS RT | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MAINLINE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 199+55 | | C/L | 53 -15' | | | | | | | | | | | | | | | | | | | | | | | | 55 | | | | | | | | | | | | EXIST. 24'' METAL PIPE - REMOVE |
| 200+00 | | LT | | DI/ | | X | | | | 18 | 40 | .064 | .060 | III | | X | | | 1 | | X | 5.0 | | | E | | 30 | | | | | | | | 1 | I | 1 | 1 | STONE FILL PAD @ OUTLET |
| 201+75 | | LT | | DI/ | | X | | | | 18 | 20 | .064 | .060 | III | | X | | | 1 | | X | 5.0 | | | E | | 21 | | | | | | | | 1 | I | | 1 | STONE FILL PAD @ OUTLET |
| 203+75 | | LT | | DI/ | | X | | | | 18 | 30 | .064 | .060 | III | | X | | | 1 | | X | 6.0 | | | E | | 26 | | | | | | | | 1 | I | | 1 | STONE FILL PAD @ OUTLET |
| TH #6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21+40 | | LT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | EXIST. 2.5' X 3.5' CGMP W/ DI - RETAIN |
| TOTALS | | | | | | | | | | 18 | 274 | .064 | .060 | III | | X | | | 3 | | 3 | | | | 3-E | | 132 | | | | | | | | 3 | I | 1 | 3 | |

## GUARD RAIL

| STA. | STA. | LT. | RT. | END TREATMENT ANCHOR LT. | END TREATMENT ANCHOR RT. |
|---|---|---|---|---|---|
| | | | | | |
| STEEL BEAM GUARD RAIL | | | | | |
| ML | ML | | | | |
| 200+58 | 201+55 | | 97 | | 1 |
| 201+08 | 201+71 | 63 | | 1 | |
| 203+77 | 204+43 | 66 | | | 1 |
| TH #6 | TH#6 | | | | |
| 20+79 | 21+16 | | 38 | 1 | |
| | TOTAL | 264 | | 4 | |
| HEAVY DUTY STEEL BEAM GUARD RAIL | | | | | |
| ML | ML | | | | |
| 201+71 | 201+96 | 25 | | | |
| 201+55 | 201+80 | | 25 | | |
| 203+52 | 203+77 | 25 | | | |
| | TH #6 | | | | |
| 20+59 | 20+79 | | 25 | | |
| | TOTAL | 100 | | | |
| CAST IN PLACE CONCRETE BRIDGE RAIL | | | | | |
| ML | ML | | | | |
| 201+96 | 203+52 | 147 | | | |
| 201+77 | 202+94.5 | | 124 | | |
| | TOTAL | 271 | | | |
| TOTALS | | | | | |

## UNDERDRAIN

| STA. | STA. | TYPE | POS. | D | L | TRENCH E | TRENCH R | GRAN BKF | FB | | MKR PST |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MAINLINE | | | | | | | | | | | |
| 203+75 | 205+50 | U | LT/LT | 6 | 175 | 71 | | | 1 | | 2 |
| EST. | | C | | 6 | 50 | | | | 1 | | 1 |
| | | U | | 6 | 50 | | | | | | |
| TOTALS | | U | | 6 | 225 | 71 | | | 2 | | 3 |
| | | C | | 6 | 50 | | | | | | |

PROJECT: CHESTER

PROJECT NO.: BRF 025-1(35)

DESIGN FILE NAME: M:\ 1549100 VAOT Chester Curv\HWY\DRAW\zf134frm.dgn
IPARM FILE NAME: zf134drl.i
SURVEYED BY: SHERIDAN
SQUAD LEADER: PORTALUPI
PLOT DATE: 28-MAY-2003
SURVEY DATE: 8/90
DRAWN BY: L. BULLOCK
SHEET: 11 OF 79

# BRIDGE QUANTITY SHEET

STATE OF VERMONT
AGENCY OF TRANSPORTATION
STRUCTURES DIVISION

| ITEM NO. | ITEM | | UNIT | QUANTITY BREAKDOWN: SUPER-STRUCT. | ABUT. #1 | ABUT. #2 | APPR. SLAB #1 | APPR. SLAB#2 | CHAN. | TOTAL | FINAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 203.17 | UNCLASSIFIED EXCAVATION | | CY | | | | | | 1,305 | 1,305 | 914 |
| 204.30 | GRANULAR BACKFILL FOR STRUCTURES | | CY | | 155 | 325 | | | | 480 | 853.5 |
| 208.30 | COFFERDAM EXCAVATION, EARTH | | CY | | 255 | 595 | | | | 850 | 939.2 |
| 208.35 | COFFERDAM EXCAVATION, ROCK | | CY | | 45 | 105 | | | | 150 | 0 |
| 208.40 | COFFERDAM STA. 201+80 | | LS | | 1 | | | | | 1 | 1 |
| 208.40 | COFFERDAM STA. 203+25 | | LS | | | 1 | | | | 1 | 1 |
| 406.25 | BITUMINOUS CONCRETE PAVEMENT (PG 58-28) | | TON | 58 | | | 11 | 19 | | 88 | 67 |
| 501.33 | CONCRETE, HIGH PERFORMANCE CLASS A | | CY | 180 | | | | | | 180 | 178.91 |
| 501.34 | CONCRETE, HIGH PERFORMANCE CLASS B | | CY | | 165 | 270 | 35 | 48 | | 518 | 506.36 |
| 504.10 | FURNISHING EQUIPMENT FOR DRIVING PILES | | LS | | 0.5 | 0.5 | | | | 1 | 1 |
| 505.17 | STEEL PILING (HP14 X 73) | | LF | | 760 | 960 | | | | 1,720 | 1322.0 |
| 506.55 | STRUCTURAL STEEL (PLATE GIRDER) | | LB | 190,000 | | | | | | 190,000 | 188561 |
| 507.15 | REINFORCING STEEL | | LB | | 12,755 | 19,560 | | | | 32,315 | 32445 |
| 507.17 | EPOXY COATED REINFORCING STEEL | | LB | 44,821 | | 170 | 4,532 | 7,519 | | 57,042 | 57745 |
| 508.15 | SHEAR CONNECTORS (1392 - 7/8" DIA. X 7") | | LS | 1 | | | | | | 1 | 1 |
| 513.25 | STRUCTURAL PAINTING, SHOP APPLIED (6T) | | LS | 1 | | | | | | 1 | 1 |
| 513.40 | SURFACE PREPARATION, SHOP | | LS | 1 | | | | | | 1 | 1 |
| 514.10 | WATER REPELLENT | | GAL | 32 | 5 | 6 | | | | 43 | 0 |
| 516.10 | BRIDGE EXPANSION JOINT | | LF | 60 | | | | | | 60 | 59.87 |
| 519.20 | SHEET MEMBRANE WATERPROOFING (MOD - TORCH APPLIED) | | SY | 417 | | | 78 | 141 | | 636 | 417 |
| 524.11 | JOINT SEALER HOT POURED | | LF | 37 | | | | | | 37 | 0 |
| 525.50 | CAST-IN-PLACE CONCRETE BRIDGE RAIL | | LF | 271 | | | | | | 271 | 270.35 |
| 528.11 | TWO - WAY TEMPORARY BRIDGE | | LS | 1 | | | | | | 1 | 1 |
| 529.10 | REMOVAL OF BRIDGE PAVEMENT | | SY | 280 | | | | | | 280 | 279.14 |
| 529.15 | REMOVAL OF STRUCTURE | | EACH | 1 | | | | | | 1 | 1 |
| 531.10 | BEARING DEVICE ASSEMBLY (GIRDERS) | | EACH | | 6 | 6 | | | | 12 | 12 |
| 531.10 | BEARING DEVICE ASSEMBLY (DECK) | | EACH | | | 1 | | | | 1 | 1 |
| 613.10 | STONE FILL, TYPE I | | CY | | 1 | 1 | | | | 2 | 0 |
| 613.11 | STONE FILL, TYPE II | | CY | | 235 | 490 | | | | 725 | 521 |
| 621.21 | HEAVY DUTY STEEL BEAM GUARD RAIL | | FT | | | | 50 | 50 | | 100 | 140 |
| 649.31 | GEOTEXTILE UNDER STONE FILL | | SY | | 345 | 725 | | | | 1,070 | 769 |
| 651.40 | GRUBBING MATERIAL | | SY | | | | | | 340 | 340 | 257 |
| 514.10 | WATER REPELLENT (MOD. SILANE) | SA/CO #1 (11-10-04) | GAL | | | | | | | | 34.5 |
| 516.10 | BRIDGE EXPANSION JOINT (ASPHALTIC PLUG) | SA/CO #1 (11-10-04) | LF | | | | | | | | 37 |
| 900.06 | EXTRA WORK ORDER (CONCRETE CRACK SEALER) | SA/CO #2 (7-14-05) | LS | | | | | | | | 1 |

McFARLAND-JOHNSON, INC.

BRIDGE(S) AT STATION(S) BEGIN STA. 201+95.58 END STA. 203+07.59
LOCATION(S) VT 103 OVER THE WILLIAMS RIVER

PREPARED BY: P. DUSTIN CHECKED BY: J. WILKSON
SUPERVISOR: M. ZYDEL

PROJECT: CHESTER PROJECT NO: BRF 025-1(35)
BR BRIDGE OF SHEET NO: 12 OF 79

# EARTHWORKS

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

| STATION | DIST | TOTAL EXCAVATION EARTH AND ROCK AREA | TOTAL EXCAVATION EARTH AND ROCK CU. YDS. | ROCK EXCAVATION AREA | ROCK EXCAVATION CU. YDS. | EMBANKMENT AREA | EMBANKMENT CU. YDS. | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| MAINLINE | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 199+50 | | 16 | | | | 1 | | | |
| | 50 | | 34 | | | | 24 | | |
| 200+00 | | 21 | | | | 25 | | | |
| | 50 | | 112 | | | | 75 | | |
| 200+50 | | 100 | | | | 61 | | | |
| | 50 | | 237 | | | | 155 | | |
| 201+00 | | 156 | | | | 106 | | | |
| | 50 | | 274 | | | | 171 | | |
| 201+50 | | 140 | | | | 79 | | | |
| | 46 | | 238 | | | | 135 | | |
| 201+96 | | 140 | | | | 79 | | | |
| | 4 | | | | | | | | |
| 202+00 | | | | | | | | | |
| | 50 | | | | | | | | |
| 202+50 | | | | | | | | | |
| | 50 | | | | | | | CUT | 2201 |
| 203+00 | | | | | | | | ROCK | 0 |
| | 6 | | | | | | | R.FAC | .495 |
| 203+06 | | 30 | | | | 25 | | FILL | 644 |
| | 44 | | 49 | | | | 39 | F.FAC | 1.15 |
| 203+50 | | 30 | | | | 25 | | EX. C | 1460 |
| | 50 | | 109 | | | | 32 | | |
| 204+00 | | 88 | | | | 10 | | | |
| | 50 | | 191 | | | | 11 | | |
| 204+50 | | 118 | | | | 2 | | | |
| | 50 | | 273 | | | | 2 | | |
| 205+00 | | 177 | | | | 0 | | | |
| | 50 | | 342 | | | | | | |
| 205+50 | | 192 | | | | 0 | | | |
| | 50 | | 260 | | | | | | |
| 206+00 | | 89 | | | | 0 | | | |
| | 50 | | 82 | | | | | | |
| 206+50 | | 0 | | | | 0 | | | |
| | 50 | | | | | | | | |
| 207+00 | | 0 | | | | 0 | | | |

| STATION | DIST | TOTAL EXCAVATION EARTH AND ROCK AREA | TOTAL EXCAVATION EARTH AND ROCK CU. YDS. | ROCK EXCAVATION AREA | ROCK EXCAVATION CU. YDS. | EMBANKMENT AREA | EMBANKMENT CU. YDS. | | |
|---|---|---|---|---|---|---|---|---|---|
| TH #6 | | | | | | | | | |
| 20+18 | | 0 | | | | 45 | | | |
| | 32 | | 4 | | | | 28 | | |
| 20+50 | | 6 | | | | 3 | | | |
| | 50 | | 19 | | | | 11 | CUT | 82 |
| 21+00 | | 14 | | | | 9 | | ROCK | 0 |
| | 50 | | 36 | | | | 8 | R.FAC | .495 |
| 21+50 | | 25 | | | | 0 | | FILL | 47 |
| | 50 | | 23 | | | | | F.FAC | 1.15 |
| 22+00 | | 0 | | | | 0 | | EX. C | 28 |

| STATION | DIST | TOTAL EXCAVATION EARTH AND ROCK AREA | TOTAL EXCAVATION EARTH AND ROCK CU. YDS. | ROCK EXCAVATION AREA | ROCK EXCAVATION CU. YDS. | EMBANKMENT AREA | EMBANKMENT CU. YDS. | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

## SUMMARY AND BALANCES

| STATION TO STATION | | TOTAL EXCAV EARTH & ROCK | ROCK EXCAV CUBIC YARDS | EMBANKMENT CUBIC YARDS | EXCESSES CUT | EXCESSES FILL | ACCUMULATIVE EXCESSES CUT | ACCUMULATIVE EXCESSES FILL |
|---|---|---|---|---|---|---|---|---|
| MAINLINE | | | | | | | | |
| 199+50 | 207+00 | 2201 | | 644 | 1460 | | 1460 | |
| TH #6 | | | | | | | | |
| 20+18 | 22+00 | 82 | | 47 | 28 | | 1488 | |
| SUBTOTAL | | 2283 | | 691 | | | 1488 | |
| DRIVES | | 10 | | | 10 | | | |
| TOTAL | | 2293 | | 691 | 1498 | | 1498 | |

### REMARKS

| | |
|---|---|
| EARTH AND ROCK EXCAVATION | 2293 |
| SOLID ROCK EXCAVATION | 0 |
| EARTH EXCAVATION | 2293 |
| PLANIMETERED FILL | 691 |
| LESS FACTORED SOLID ROCK | 0 |
| LESS DISPLACEMENT OF ANY LARGE STRUCTURES | 0 |
| NET PLANIMETERED FILL | 691 |
| FACTOR | 104 |
| PLANIMETERED FILL INCLUDING FACTOR | 795 |
| MATERIALS AVAILABLE FOR FILLS | |
| EARTH EXCAVATION | 2293 |
| CHANNEL EXCAVATION | 0 |
| UNDERDRAIN EXCAVATION | 0 |
| STRUCTURE EXCAVATION | 0 |
| TOTAL MATERIAL AVAILABLE FOR FILL | 2293 |
| TOTAL FILL INCLUDING FACTOR | 795 |
| TOTAL MATERIAL FOR FILL | 0 |
| BORROW | 0 |
| EXCESS EXCAVATION | 1498 |

PROJECT: CHESTER

PROJECT NO.: BRF 025-1(35)

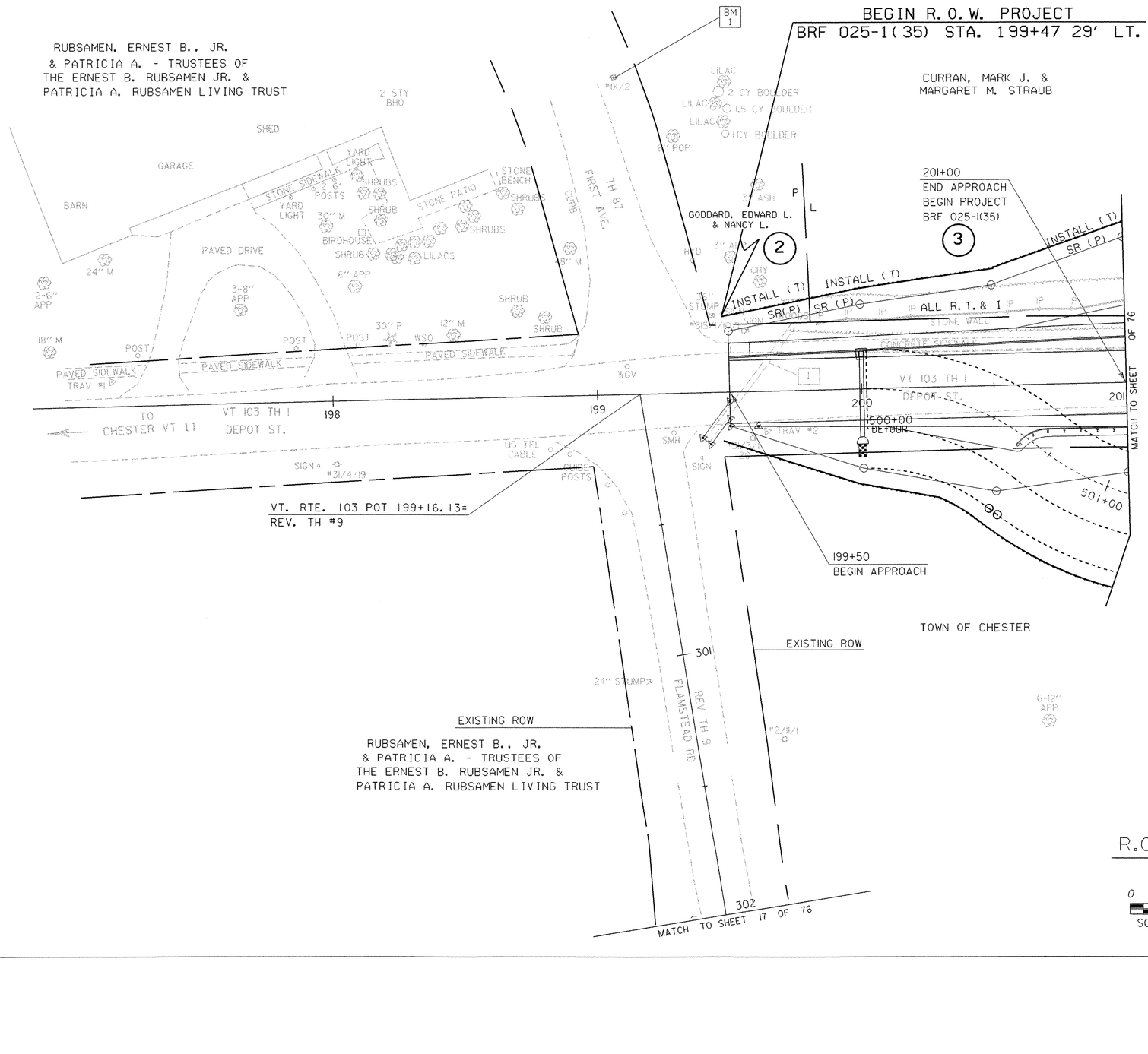
DESIGN FILE NAME: M:\ 1549100 VAOT-Chester Curv\HWY\DRAW\zf134frm.dgn
IPARM FILE NAME: zf134ew.I
SURVEYED BY: SHERIDAN
SQUAD LEADER: PORTALUPI
PLOT DATE: 28-MAY-2003
SURVEY DATE: 8/90
DRAWN BY: L.BULLOCK
SHEET: 13 OF 79

BENCHMARKS

BM 1 — BM #1 RAILROAD SPIKE IN POLE ELEV 591.26'

N

VT STATE PLANE GRID




LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE TOWN OF CHESTER'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

R.O.W. PLAN

1" = 20'

0 20 40

SCALE IN FEET

**DATUM**

VERTICAL NGVD 1929

HORIZONTAL NAD 1927

SURVEYED BY SHERIDAN DATE 08-90

DRAWN BY L. BULLOCK DATE 11-90

SQUAD LEADER PORTALUPI

DESIGN FILE NO. M:\ 1549100 VAOT-Chester Curv\HWY\DRAW\rbi34zzz.dgn

PRF FILE RBI34RI.I DATE PLOTTED 28-MAY-2003

PROJ. NAME CHESTER

PROJ. NO. BRF025-1(35)

SHEET 14 OF 79 SHEETS

# R.O.W. PLAN

1" = 20'

0 20 40

SCALE IN FEET

VT STATE PLANE GRID

N

BM 2 — BM #2
RR SPIKE IN TREE
ELEV 600.75'

BM 3 — BM #3
CHISELED SQUARE ON NE BRIDGE CURB
ELEV 597.87'

TOWN OF CHESTER

MATCH TO SHEET 14 OF 76

MATCH TO SHEET 17 OF 76

MATCH TO SHEET 16 OF 76

INSTALL (T) SR (P)

INSTALL & MAINTAIN (P)

ALL R.T. & I.

BEGIN BRIDGE
201+95.84
ELEV 597.82

201+55
25' LT.

CUL., DIT. & DR. (P)

CURRAN, MARK J. & STRAUB, MARGARET M.

3

201+99
22' LT.

INSTALL (T) CHANNEL (P)

202+10
28' LT.

202+68
9' LT.

END BRIDGE
203+05.87
ELEV 600.57

203+29
28' LT.

203+54
28' LT.

CHANNEL (P)

IPPOLITO, PAUL E. & NORMA J.

CUL. & DIT. (P)

ALL R.T. & I.

INSTALL (T) 53

203+54
25' LT.

4

INSTALL & MAINTAIN (P)

INSTALL (T)

SR (T)

RETIRE

REMOVE

DEEN, MAYNARD D. & ALLISON KIBBE

6B

6A

SR (P)

TEMPORARY BRIDGE CHANNEL (P)

DEFLECTOR (T)

RETIRE 5

INSTALL (T)

REMOVE

INSTALL & MAINTAIN (P)

DEEN, MAYNARD D. & ALLISON KIBBE

RETIRE

RETIRE

REMOVE

REMOVE UE (P)

POLE #19

INSTALL & MAINTAIN (P) UE (P)

TH #6 20+18.35
BEGIN CONSTRUCTION

5

HEALD, PRISCILLA H.

INSTALL (T)
VT. RTE. 103 POC 203+50=
TH #6 20+00
DELTA = 110°42'34" RT

EXISTING ROW

N/F
CASSIDY, ROBERT & BERTHA

TH #6 22+25.00
END APPROACH

TH #6 22+00.00
END CONSTRUCTION
BEGIN APPROACH

N/F
STILES

LEGEND
LIMITS OF WETLAND

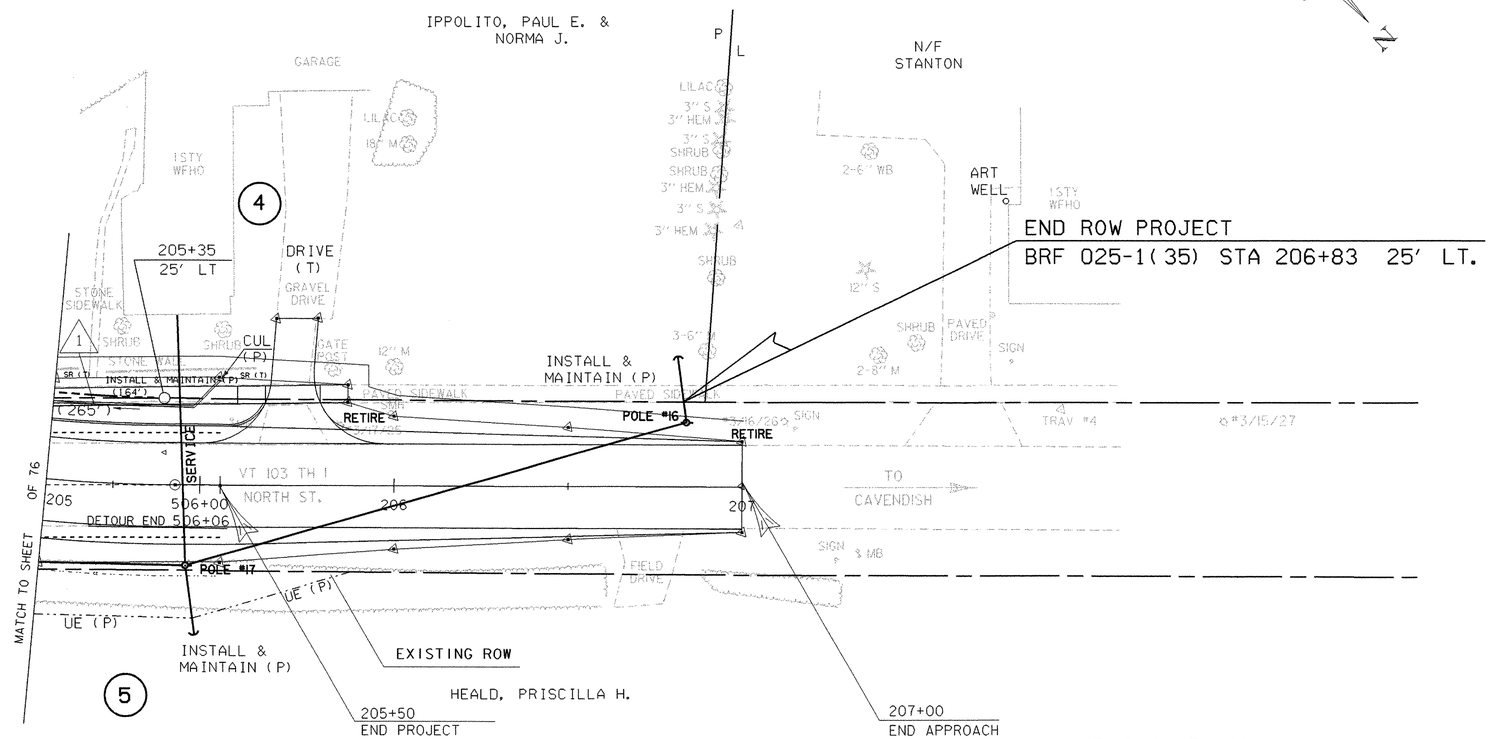
STONE WALL
STONE FILL
WILLIAMS RIVER
WOODS
SHRUBS
3-MB
3 SPRUCE
2-6" ELM
APPLE
CONC. SW
PORCH
GRAVEL DRIVE
1½ STORY HOUSE
SHED
BUILDING
GARDEN
CONC DAM
LOG DAM
CONC SIDEWALK
PAVED SIDEWALK
PAVED PARKING
STEPS
FLOWER BOX
SIGNPOST
HITCH POST LIGHT
WSO
TRAV #3
24" ASH
MAPLE
WOODS
SWINGSET
VT 103 TH 1
NORTH ST.
GREEN MTN. TNPK. TH 6
DEPOT ST.
CONCRETE SIDEWALK
RET WALL
#21/11/3-2
#18/2

DATUM
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE TOWN OF CHESTER'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

| | | | |
|---|---|---|---|
| SURVEYED BY | GILMAN | DATE | 12/92 |
| DRAWN BY | L. BULLOCK | DATE | 1/93 |
| SQUAD LEADER | PORTALUPI | | |
| DESIGN FILE NO. | M:\ 1549101VAOT-Chester Curv \HWY\DRAW\rbl34zzz.dgn | | |
| IPARM FILE | rbl34r2.1 | DATE PLOTTED | 28-MAY-2003 |
| PROJ. NAME | CHESTER | | |
| PROJ. NO. | BRF 025-1(35) | | |

SHEET 15 OF 79 SHEETS




**DATUM**

VERTICAL NGVD 1929

HORIZONTAL NAD 1927

LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE TOWN OF CHESTER'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

# R.O.W. PLAN

1" = 20'

0 20 40

SCALE IN FEET

SURVEYED BY SHERIDAN DATE 08-90

DRAWN BY L. BULLOCK DATE 11-90

SQUAD LEADER PORTALUPI

DESIGN FILE NO. M:\ 1549101 VAOT-Chester Curv HWY\DRAW\rbl3zzz.dgn

IPARM NAME rbl34r3.1 DATE PLOTTED 28-MAY-2003

PROJ. NAME CHESTER

PROJ. NO. BRF025-1(35)

SHEET 16 OF 79 SHEETS

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

## TABLE OF PROJECT PROPERTY ACQUISITION

ALL STATIONS ARE FROM THE REVISED ℄

| PARCEL NO. | GRANTOR | SHEET NO. | BEGINNING STATION | ENDING STATION | TAKING | REM. | RIGHTS | TITLE TAKEN | DATE | TOWN OR CITY RECORDED | BK. | PG. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| . 1A | RUBSAMEN, ERNEST B. JR. & | | | | | | | | | | | | DELETED |
| . | PATRICIA A. - TRUSTEES OF THE ERNEST | | | | | | | | | | | | |
| . | B. RUBSAMEN JR. & PATRICIA A. | | | | | | | | | | | | |
| . | RUBSAMEN LIVING TRUST | | | | | | | | | | | | |
| . | | | | | | | | | | | | | |
| 2 | GODDARD, EDWARD L. & NANCY L. | 17 | 199+64 LT. | 199+80 LT. | | | SLOPE (P) 25 S.F.± | | | CHESTER | | | |
| | | | 199+47 LT. | 199+80 LT. | | | INSTALL (T) | | | | | | EROSION CONTROL |
| 3 | CURRAN, MARK J. & | 17,18 | 201+55 LT. | 202+10 LT. | 187 S.F.± | | | | | CHESTER | | | |
| | STRAUB, MARGARET M. | | 199+80 LT. | 202+49 LT. | | | INSTALL (T) | | | | | | EROSION CONTROL |
| | | | 199+80 LT. | 201+96 LT. | | | SLOPE (P) 3275 S.F.± | | | | | | |
| | | | 199+82 LT. | 201+65 LT. | | | ALL R.T.& I. | | | | | | STONE WALL |
| | | | 201+75 LT. | | | | CUL.,DIT. & DRAIN. (P) | | | | | | |
| | | | 201+96 LT. | 202+41 LT. | | | CHANNEL (P) 585 S.F.± | | | | | | |
| | | | 201+05 LT. | 201+12 LT. | | | INSTALL & MAINTAIN (P) | | | | | | GUARD RAIL |
| 4 | IPPOLITO, PAUL F. & NORMA J. | 18,19 | 202+68 LT. | 205+33 LT. | 4050 S.F.± | | | | | CHESTER | | | |
| | | | 203+29 LT. | 204+00 LT. | | | CHANNEL (P) 1170 S.F.± | | | | | | |
| | | | 203+43 LT. | 203+83 LT. | | | ALL R.T.& I. | | | | | | STONE WALL |
| | | | 203+50 LT. | 203+68 LT. | | | CULVERT & DITCH (P) | | | | | | |
| | | | 203+77 LT. | 205+00 LT. | | | INSTALL (T) | | | | | | EROSION CONTROL |
| | | | 203+81 LT. | 204+00 LT. | | | ALL R.T.& I. | | | | | | STONE WALL |
| | | | 204+00 LT. | 205+87 LT. | | | SLOPE (T) 820 S.F.± | | | | | | |
| | | | 204+37 LT. | 204+39 LT. | | | INSTALL & MAINTAIN (P) | | | | | | GUARD RAIL |
| | | | 204+89 LT. | 205+87 LT. | | | INSTALL & MAINTAIN (P) | | | | | | SIDEWALK |
| | | | 205+71 LT. | | | | DRIVE (T) | | | | | | 12' GRAVEL |
| | | | 206+80 LT. | 206+83 LT. | | | INSTALL & MAINTAIN (P) | | | | | | GUYWIRE |
| | | | 205+45 LT. | 205+50 LT. | | | CULVERT (P) | | | | | | |
| 5 | HEALD, PRISCILLA H. | 18,19 | TH 6 20+80 LT. | TH 6 21+27 LT. | | | INSTALL (T) | | | CHESTER | | | EROSION CONTROL |
| | | | TH 6 20+97 LT. | TH 6 21+04 LT. | | | SLOPE (T) 7 S.F.± | | | | | | |
| | | | 203+54 RT. | 205+89 RT. | | | UTILITY EASE. (P) 2510 S.F.± | | | | | | |
| | | | 203+98 RT. | 204+02 RT. | | | INSTALL & MAINTAIN (P) | | | | | | GUY WIRE |
| | | | 205+40 RT. | 205+43 RT. | | | INSTALL & MAINTAIN (P) | | | | | | GUY WIRE |

| REVISION NO. | SHEET | DESCRIPTION OF REVISION | DATE | MADE BY | APPROVED BY |
|---|---|---|---|---|---|
| 1 | 15,18 | PARCEL NO. 3 CURRAN & STRAUB. ADD CUL., DIT. & DR. (P) AT STA. 201+75 LT. PER C.O. 9112. | 04-05-00 | M.J.R. | R.P.D. |
| 2 | 16,18 20 | PARCEL NO. 6 DEEN, MAYNARD, & ALLISON-KIBB CHANGE STATIONS FOR FENCE FROM TH6 22+89 RT. TO TH 6 24+42 RT. AND TH6 24+42 TO TH6 25+05 RT. ON DETAIL SHEET. REMOVE ALL R.T.&I. AND ADD 'REMOVE & RESET (T). PER C.O. 9114. | 04-17-00 | R.B.K. | R.P.D. |
| 3 | 16,18 20 | PARCEL NO. 6A DEEN. SLOPE RE-PLOTTED TO FALL WITHIN EXISTING R.O.W.: REMOVE 'SLOPE (P)', REMOVE 'REMOVE & RESET(T)', REMOVE 'ALL R.T.&I.' STONEWALL, REVISE 'INSTALL(T)' SILT FENCE, REMOVE 'ALL R.T.&I.' TWO LIGHTS, REMOVE 'ALL R.T.&I.' FENCE. PER C.O. 9122. | 05-22-00 | R.B.K. | R.P.D. |
| 4 | | GENERAL CHANGE. CHANGE BEGIN ROW PROJECT STA, LENGTH OF ROW PROJECT ON TITLE SHEET. NEW TITLE SHEET SHOWING DETOUR AND DESCRIPTION OF SAME. CHANGE LAYOUT SHEETS. PER C.O. 9154. | 09-29-00 | S.L.D. | R.P.D. |
| 5 | | PARCEL NO. 1 RUBSAMEN ET. AL. DELETE PARCEL 1A. CHANGE LAYOUT SHEET. | 09-29-00 | S.L.D. | R.P.D. |
| 6 | | PARCEL NO. 2 GODDARD. CHANGE WORDING IN REMARKS COLUMN FROM 'SILT FENCE' TO 'EROSION CONTROL'. PER C.O. 9156. | 09-29-00 | S.L.D. | R.P.D. |
| 7 | | PARCEL NO. 3 CURRAN & STRAUB. CHANGE WORDING IN REMARKS COLUMN FROM 'SILT FENCE' TO 'EROSION CONTROL' PER C.O. 9157. | 09-29-00 | S.L.D. | R.P.D. |
| 8 | | PARCEL NO. 4 IPPOLITO. CHANGE WORDING IN REMARKS COLUMN FROM 'SILT FENCE' TO 'EROSION CONTROL'. CHANGE BEGINNING AND ENDING STATIONS FOR GUYWIRE. CHANGE LOCATION OF GUYWIRE ON LAYOUT. PER C.O. 9158. | 09-29-00 | S.L.D. | R.P.D. |

M:\ 1549100 Chester Curv\HWY\DRAW\rbl34dl.i
ACCT.rdrown
M:\87bl34\Structures\rbl34d.dgn
DATE PLOTTED 28-MAY-2003

DR.(P)- DRAINAGE RIGHT
DIT.(P)- DITCHING RIGHT
CH.(P)- CHANNEL RT.
DRIVE (T)- DRIVE RIGHT
CUL.(P)- CULVERT RIGHT
[W]- WATER SOURCES

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

LEGEND
C&T (P) CLEARING & TRIMMING
CZ (P) CLEAR ZONE
CONST.(T) CONSTRUCTION EASEMENT
SR SR SLOPE RIGHTS
P L PROPERTY LINE
TOP OF CUT
TOE OF SLOPE
UE (P) PERMANENT UTILITY EASEMENT

APPROVED: LAWRENCE W. BLISS DATE: 08-16-99
CHIEF, PLANS & TITLES

R.O.W. PLANS
CHESTER
BRF 025-1 ( 35)
SHEET 17 OF 79

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

## TABLE OF PROJECT PROPERTY ACQUISITION

ALL STATIONS ARE FROM THE REVISED ℄

| PARCEL NO. | GRANTOR | SHEET NO. | BEGINNING STATION | ENDING STATION | TAKING | REM. | RIGHTS | TITLE TAKEN | DATE | TOWN OR CITY RECORDED | BK. | PG. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6A | DEEN, MAYNARD D. & ALLISON KIBBE | 18 | 202+36 RT. | 202+67 RT. | | | CHANNEL (P) 410 S.F.± | | | CHESTER | | | |
| . | | | 202+68 RT. | 202+70 RT. | | | ALL R.T.& I. | | | | | | STONE WALL |
| . | | | TH 6 21+46 RT. | | | | INSTALL (T) | | | | | | EROSION CONTROL |
| . | | | TH 6 21+50 RT. | | | | INSTALL & MAINTAIN (P) | | | | | | GUY WIRE |
| . | | | 202+85 RT. | 202+90 RT. | | | ALL R.T.& I. | | | | | | FENCE |
| | | | 202+71 RT. | 202+83 RT. | | | ALL R.T.& I. | | | | | | FLOWER BOXES |
| | | | | | | | | | | | | | PERSONAL PROPERTY |
| 6B | | 18 | 201+59 RT. | 201+64 RT. | | | ALL R.T.& I. | | | | | | RETAINING WALL |
| | | | 201+59 RT. | 201+85 RT. | | | SLOPE (P) 460 S.F.± | | | | | | |
| | | | 201+59 RT. | 202+86 RT. | | | DETOUR (T) 0.11A± | | | | | | TWO-WAY TRAFFIC |
| | | | 201+80 RT. | 202+06 RT. | | | CHANNEL (P) 530 S.F.± | | | | | | |
| 8 | CENTRAL VERMONT PUBLIC SERVICE CORP. | | | | | | | | | | | | UTILITY |
| 9 | VERMONT TELEPHONE CO. | | | | | | | | | | | | UTILITY |
| 10 | CABLE TV | | | | | | | | | | | | UTILITY |

| REVISION NO. | SHEET | DESCRIPTION OF REVISION | DATE | MADE BY | APPROVED BY |
|---|---|---|---|---|---|
| 9 | | PARCEL NO. 5 HEALD. CHANGE WORDING IN REMARKS COLUMN FROM "SILT FENCE" TO "EROSION CONTROL". CHANGE "CUT + TRIM" TO "UTILITY EASE.". CHANGE BEGINNING STATION ON UTILITY EASE. AND INCREASE AREA TO 2510 SF±. CHANGE LAYOUT. PER C.O. 9159. | 09-29-00 | S.L.D. | R.P.D. |
| 10 | | PARCEL NO. 6 DEEN. CHANGE WORDING IN REMARKS COLUMN FROM "SILT FENCE" TO "EROSION CONTROL" ON 6A. CHANGE BEGIN STATION OF EROSION CONTROL AND GUYWIRE. DELETE INSTALL (T) ON 6B. ADD DETOUR (T) NEW STATIONS AND AREA ALONG WITH "2 WAY TRAFFIC" IN REMARKS COLUMN. CHANGE "CUT + TRIM" TO "UTILITY EASE. (P)" ON 6C. PER C.O. 9160. | 09-29-00 | S.L.D. | R.P.D. |

M:\ 1549100 Chester Curv\HWY\DRAW\rbl34d2.i
ACCT.rdrown
M:\87bl34\Structures\rbl34d.dgn
DATE PLOTTED 28-MAY-2003

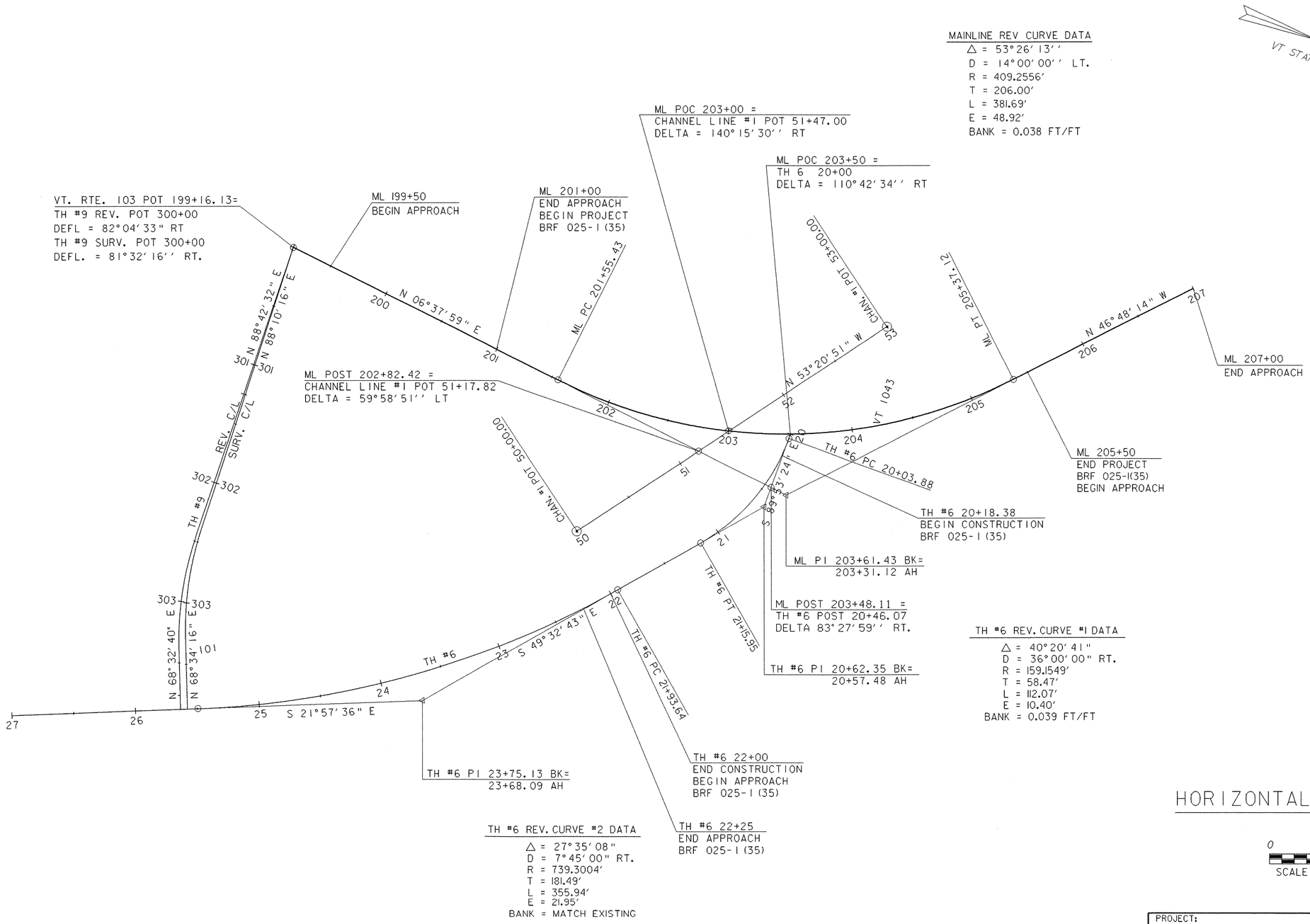
DR. (P)- DRAINAGE RIGHT
DIT. (P)- DITCHING RIGHT
CH. (P)- CHANNEL RT.
DRIVE (T)- DRIVE RIGHT
CUL. (P)- CULVERT RIGHT
[W]- WATER SOURCES

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

LEGEND
C&T (P) CLEARING & TRIMMING
CZ (P) CLEAR ZONE
CONST. (T) CONSTRUCTION EASEMENT
SR SR SLOPE RIGHTS
P L PROPERTY LINE
TOP OF CUT
TOE OF SLOPE
UE (P) PERMANENT UTILITY EASEMENT

APPROVED: LAWRENCE W. BLISS DATE: 08-16-99
CHIEF, PLANS & TITLES

R. O. W. PLANS
CHESTER
BRF 025-1 ( 35)
SHEET 18 OF 79




MAINLINE REV CURVE DATA
- △ = 53°26'13''
- D = 14°00'00'' LT.
- R = 409.2556'
- T = 206.00'
- L = 381.69'
- E = 48.92'
- BANK = 0.038 FT/FT

TH #6 REV. CURVE #1 DATA
- △ = 40°20'41"
- D = 36°00'00" RT.
- R = 159.1549'
- T = 58.47'
- L = 112.07'
- E = 10.40'
- BANK = 0.039 FT/FT

TH #6 REV. CURVE #2 DATA
- △ = 27°35'08"
- D = 7°45'00" RT.
- R = 739.3004'
- T = 181.49'
- L = 355.94'
- E = 21.95'
- BANK = MATCH EXISTING

VT STATE PLANE GRID

N

# HORIZONTAL ALIGNMENTS

0 40 80
SCALE IN FEET

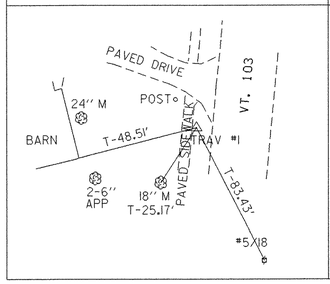
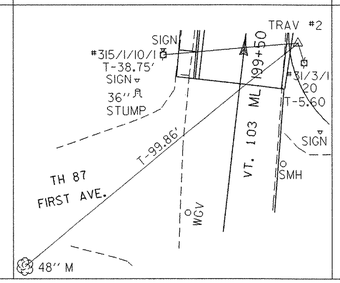
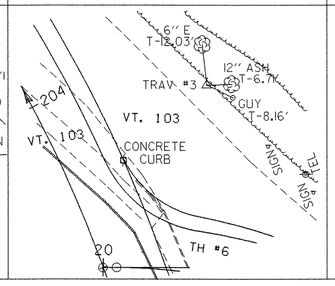
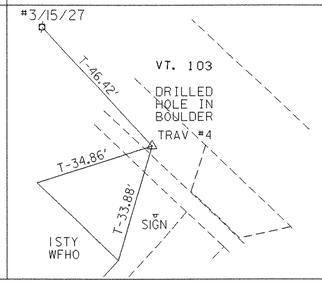
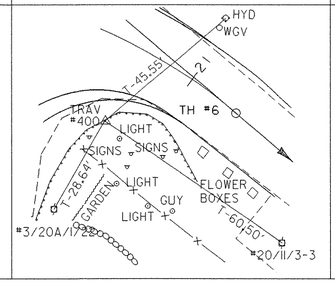
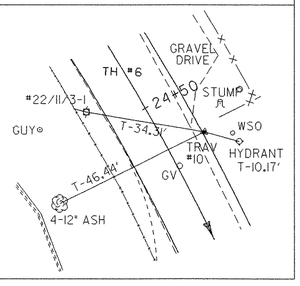
DATUM
- VERTICAL: NGVD 1929
- HORIZONTAL: NAD 1927

| | |
|---|---|
| PROJECT: CHESTER | PROJECT NO.: BRF 025-1(35) |
| DESIGN FILE NAME: M:\ 154900 VAOT-Chester Cur\HWY\DRAW\zf134aln.dgn | |
| IPARM FILE NAME: zf134aln.i | PLOT DATE: 28-MAY-2003 |
| SURVEYED BY: SHERIDAN | SURVEY DATE: 8-90 |
| SQUAD LEADER: PORTALUPI | DRAWN BY: L. BULLOCK |
| | SHEET: 19 OF 79 |

## TRAVERSE TIES

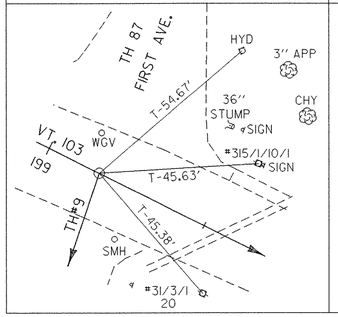
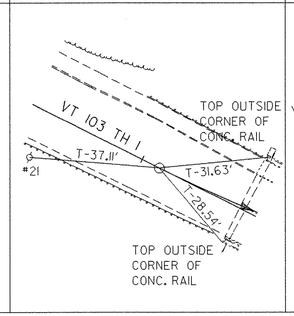
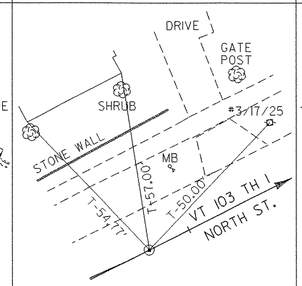
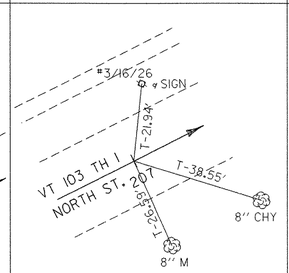
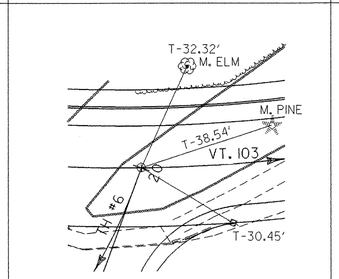
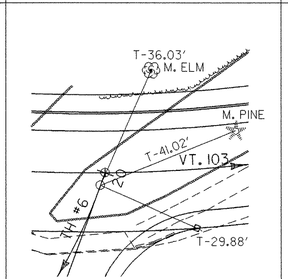
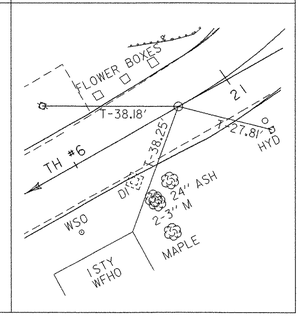
N

VT STATE PLANE GRID

| TRAV. #1 | TRAV. #2 | TRAV. #3 | TRAV. #4 | TRAV. #400 | TRAV. #10 |
|---|---|---|---|---|---|
| N = 80938.03430 | N = 81180.84240 | N = 81616.08460 | N = 81876.3900 | N = 81523.7827 | N = 81272.1200 |
| E = 76098.32970 | E = 76151.44310 | E = 76164.94370 | E = 75831.1200 | E = 76204.1569 | E = 76481.0000 |
| Z = 588.293 | Z = 588.816 | Z = 601.803 | Z = 601.5220 | Z = 597.4954 | Z = 589.4150 |
|  |  |  |  |  |  |

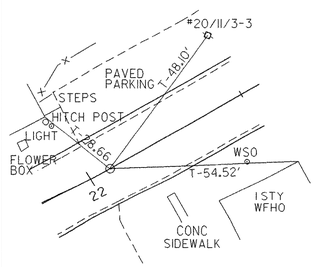
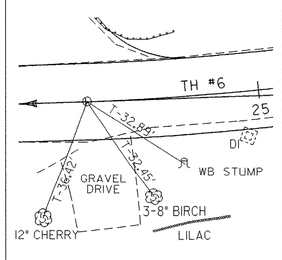


## ALIGNMENT TIES

| ML POT 199+16.13 = TH #9 | ML PC 201+55.43 | ML PT 205+37.13 | ML PT 207+00.00 | TH #6 POT 20+00.00 = ML POC 203+50.00 | TH #6 PC 20+03.88 | TH #6 PT 21+15.95 |
|---|---|---|---|---|---|---|
| N = 81135.17 | N = 81372.87 | N = 81718.50 | N = 81829.99 | N = 81564.18 | N = 81564.18 | N = 81526.13 |
| E = 76130.79 | E = 76158.44 | E = 76032.05 | E = 75913.31 | E = 76134.99 | E = 76138.87 | E = 76241.83 |
|  |  |  |  |  |  |  |



## ALIGNMENT TIES

| TH #6 PC 21+93.64 | TH #6 PT 25+49.58 |
|---|---|
| N = 81475.72 | N = 81189.64 |
| E = 76300.95 | E = 76506.92 |
|  |  |



NOT TO SCALE

**DATUM**

VERTICAL NGVD 1929

HORIZONTAL NAD 1927

| PROJECT: | PROJECT NO.: |
|---|---|
| CHESTER | BRF 025-1(35) |

DESIGN FILE NAME: M:\ 1549100 VAOT-Chester Cur\HWY\DRAW\zf134aln.dgn

IPARM FILE NAME: zf134tie.i

SURVEYED BY: SHERIDAN

SQUAD LEADER: PORTALUPI

PLOT DATE: 28-MAY-2003

SURVEY DATE: 8/90

DRAWN BY: L. BULLOCK

SHEET: 20 OF 79

EXISTING DRAINAGE

[1] ML 199+55 CL ASKEW 53°15'24" METAL PIPE - REMOVE

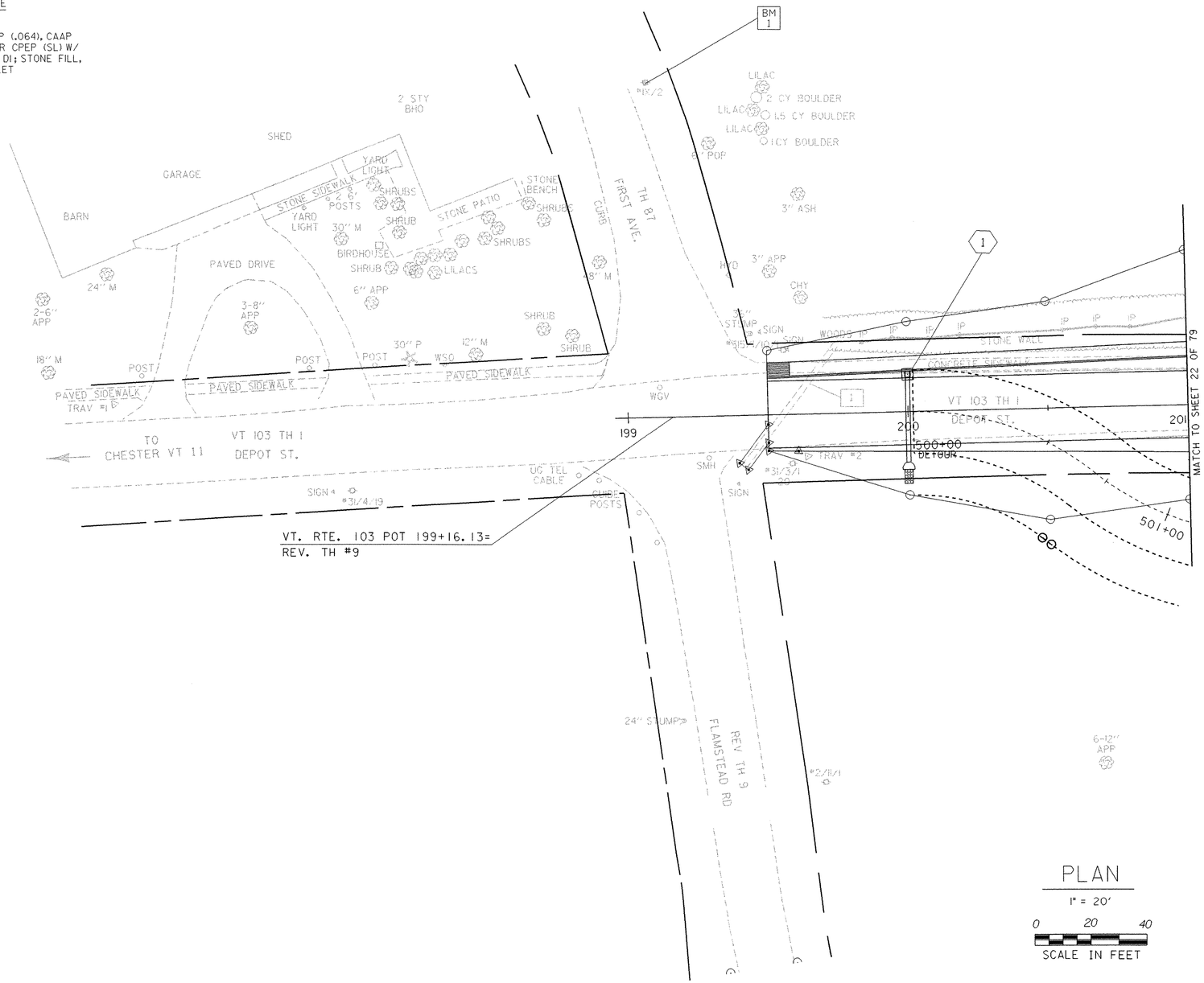
BENCHMARKS

[BM 1] BM #1 RAILROAD SPIKE IN POLE ELEV 591.26'

VT STATE PLANE GRID

NEW DRAINAGE

(1) ML 200+00 LT
NEW 18" X 20' PCCSP (.064), CAAP (.060), RCP CL. III, OR CPEP (SL) W/ MES AND PRC PIPE DI; STONE FILL, TYPE I PAD @ OUTLET




REMOVAL AND DISPOSAL OF GUARD RAIL
ML 200+78 RT. - ML 201+00 RT.

COLD PLANING - BITUMINOUS CONCRETE
ML 199+50 - ML 200+00

REPLACE - BITUMINOUS CONCRETE
EDGE OF EXISTING ROAD ABOVE EXISTING PIPE TO ML 199+50 -

CONSTRUCT SIDEWALK RAMP
ML 199+50 LT. - ML 199+58 LT. (TYPE I)

BITUMINOUS CONCRETE SIDEWALK
ML 199+50 LT. - ML 201+00 LT.

CAST-IN-PLACE CONCRETE CURB, TYPE B
ML 199+50 LT. - ML 201+00 LT.

STEEL BEAM GUARD RAIL
ML 200+54 RT. - ML 201+00 RT.

ANCHOR FOR STEEL BEAM RAIL
ML 200+54 RT.

PLAN
1" = 20'
0 20 40
SCALE IN FEET

DATUM
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

SURVEYED BY SHERIDAN DATE 08-90
DRAWN BY L. BULLOCK DATE 11-90
SQUAD LEADER PORTALUPI
DESIGN FILE NO. M:\ 1549101VA0T-Chester Curv \HWY\DRAW\zf134bdr.dgn
PRF FILE ZF134LI.I DATE PLOTTED 28-MAY-2003
PROJ. NAME CHESTER
PROJ. NO. BRF 025-1(35)
SHEET 21 OF 79 SHEETS

REMOVAL AND DISPOSAL OF GUARD RAIL
ML 201+43 LT. - ML 201+80 LT.
ML 201+00 RT. - ML 201+80 RT.
ML 202+82 RT. - ML 203+30 RT.
ML 202+75 RT. - TH #6 21+20 RT.

ANCHOR FOR STEEL BEAM RAIL
~~ML 201+19 LT.~~
ML 200+69 RT.
ML 204+30 LT
TH #6 21+02.5 RT.

STEEL BEAM GUARD RAIL
ML 201+08 LT. - ML 201+71 LT.
ML 200+58 RT. - ML 201+55 RT.
ML 203+77 LT. - ML 204+43 LT.
TH #6 20+79 RT. - TH #6 21+16 RT.

HEAVY DUTY STEEL BEAM GUARD RAIL
ML 201+71 LT. - ML 201+96 LT.
ML 201+55 RT. - ML 201+80 RT.
ML 203+52 LT. - ML 203+77 LT.
ML 202+59 RT. - TH #6 20+79 RT.

CAST IN PLACE CONCRETE BRIDGE RAIL
ML 201+96 LT. - ML 203+52 LT.
ML 201+80 RT. - ML 202+94.5 RT.

REMOVING AND RESETTING FENCE
TH #6 20+81 RT. - TH #6 21+46 RT.

EXISTING DRAINAGE

2 — TH #6 21+40 EXISTING 2.5' X 3.5' CGMP W/ DI - RETAIN

UNDERDRAIN

1 — ML 203+75 LT. - ML 205+00 LT.
NEW 6" UNDERDRAIN TO
OUTLET INTO NEW DI

NEW DRAINAGE

2 — ML 201+75 LT
NEW 18" X 20' PCCSP (.064), CAAP (.060), RCP CL. III, OR CPEP (SL) W/ MES AND PRC PIPE DI; STONE FILL, TYPE I PAD @ OUTLET

3 — ML 203+75 LT
NEW 18" X 30' PCCSP (.064, CAAP (.060), RCP CL. III, OR CPEP (SL) W/ MES AND PRC PIPE DI; STONE FILL, TYPE I PAD @ OUTLET

BENCHMARKS

BM 2 — BM #2
RR SPIKE IN TREE
ELEV 600.75'

BM 3 — BM #3
CHISELED SQUARE ON NE BRIDGE CURB
ELEV 597.87'

BITUMINOUS CONCRETE SIDEWALK
ML 201+00 LT. - ML 201+93 LT.
ML 203+51 LT. - ML 205+00 LT.

CAST-IN-PLACE CONCRETE CURB, TYPE B
ML 201+00 LT. - ML 201+93 LT.
ML 203+51 LT. - ML 205+00 LT.

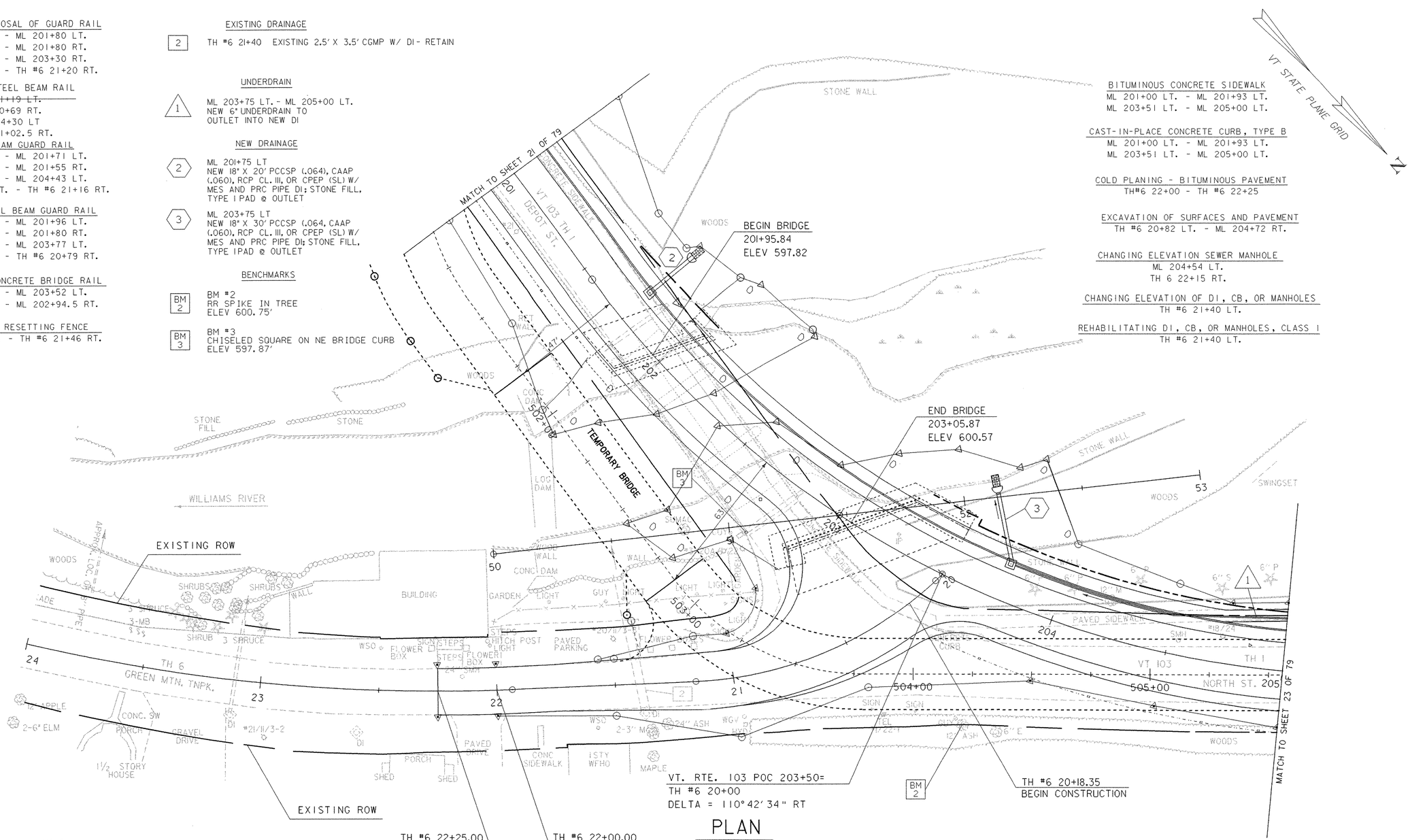
COLD PLANING - BITUMINOUS PAVEMENT
TH #6 22+00 - TH #6 22+25

EXCAVATION OF SURFACES AND PAVEMENT
TH #6 20+82 LT. - ML 204+72 RT.

CHANGING ELEVATION SEWER MANHOLE
ML 204+54 LT.
TH 6 22+15 RT.

CHANGING ELEVATION OF DI, CB, OR MANHOLES
TH #6 21+40 LT.

REHABILITATING DI, CB, OR MANHOLES, CLASS I
TH #6 21+40 LT.




PLAN
1" = 20'
0 20 40
SCALE IN FEET

NOTE:
BEGIN TEMPORARY BRIDGE CENTER LINE FROM ML STA. 201+68.44 OFFSET 47.29' RT

NOTE:
END TEMPORARY BRIDGE CENTER LINE FROM ML STA. 202+62.29 OFFSET 63.11' RT

LEGEND
LIMITS OF WETLAND

**DATUM**
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

SURVEYED BY GILMAN DATE 12/92
DRAWN BY L. BULLOCK DATE 1/93
SQUAD LEADER PORTALUPI
DESIGN FILE NO. M:\ 1549101VAOT-Chester Curv \HWY\DRAW\zf134bdr.dgn
IPARM FILE zf13412.i DATE PLOTTED 28-MAY-2003
PROJ. NAME CHESTER
PROJ. NO. BRF 025-1(35)
SHEET 22 OF 79 SHEETS

CONSTRUCT DRIVE
ML 205+71 LT. - 12' GRAVEL

BITUMINOUS CONCRETE SIDEWALK
ML 205+00 LT. - ML 205+87 LT.

CONSTRUCT SIDEWALK RAMP
ML 205+55 LT. - ML 205+63 LT. (TYPE I)
ML 205+79 LT. - ML 205+87 LT. (TYPE I)

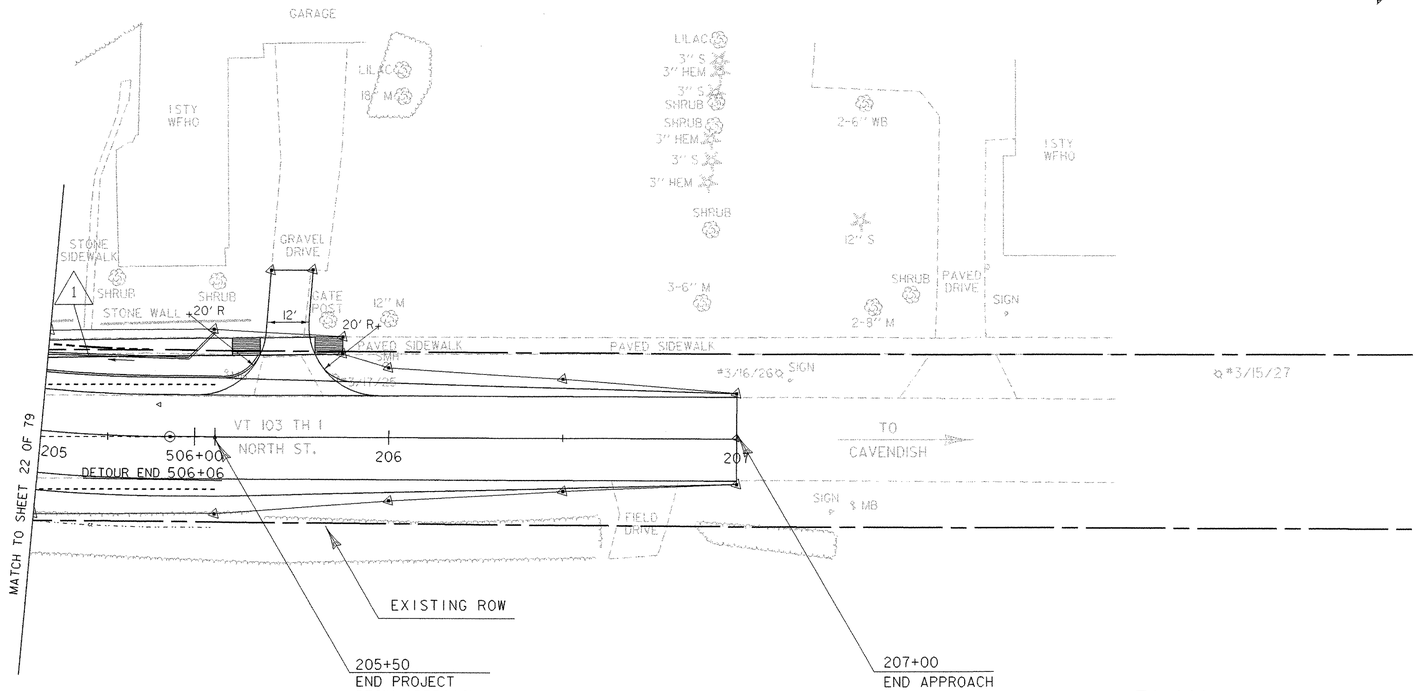
COLD PLANING - BITUMINOUS CONCRETE
ML 206+50 - ML 207+00

RELOCATE MAILBOX, SINGLE SUPPORT
ML 205+53 LT.

CAS-IN-PLACE CONCRETE CURB, TYPE B
ML 205+00 LT. - ML 205+63 LT.

UNDERDRAIN

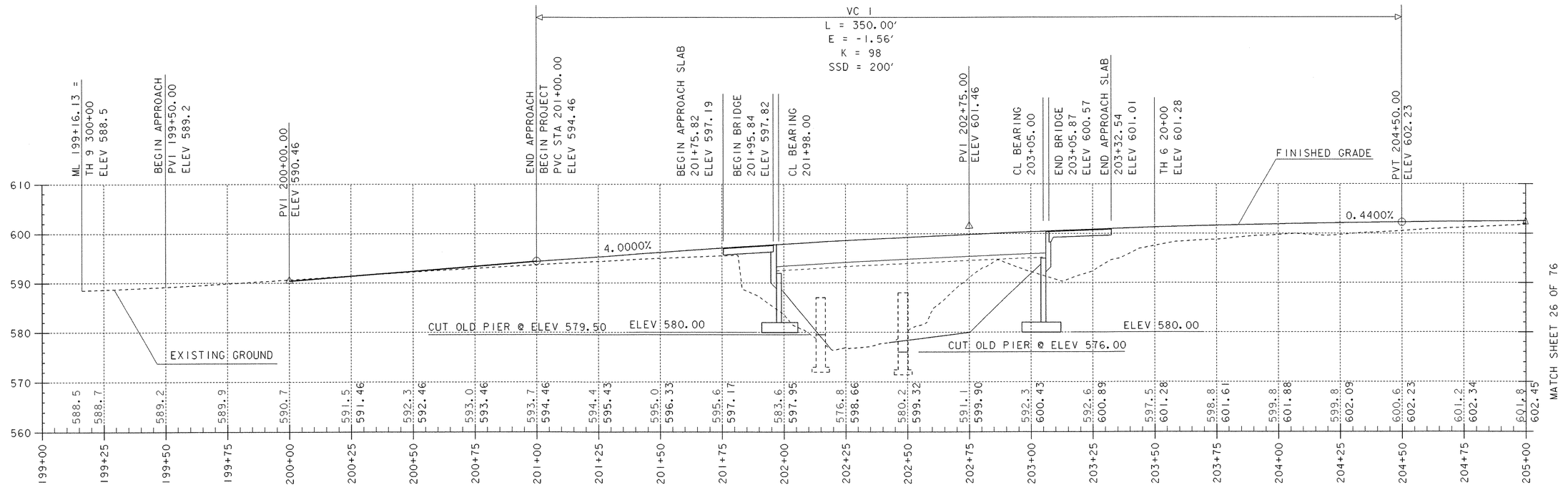
1 ML 205+00 LT. - ML 205+50 LT.
NEW 6" UNDERDRAIN W/ FLUSHING
BASIN @ 205+50 LT.




PLAN
1" = 20'
0 20 40
SCALE IN FEET

**DATUM**
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

SURVEYED BY SHERIDAN DATE 08-90
DRAWN BY L. BULLOCK DATE 11-90
SQUAD LEADER PORTALUPI
DESIGN FILE NO. M:\ 1549101VAOT-Chester Curv \HWY\DRAW\zfi34bdr.dgn
IPARM NAME zfi3413.1 DATE PLOTTED 28-MAY-2003
PROJ. NAME CHESTER
PROJ. NO. BRF 025-1(35)
SHEET 23 OF 79 SHEETS



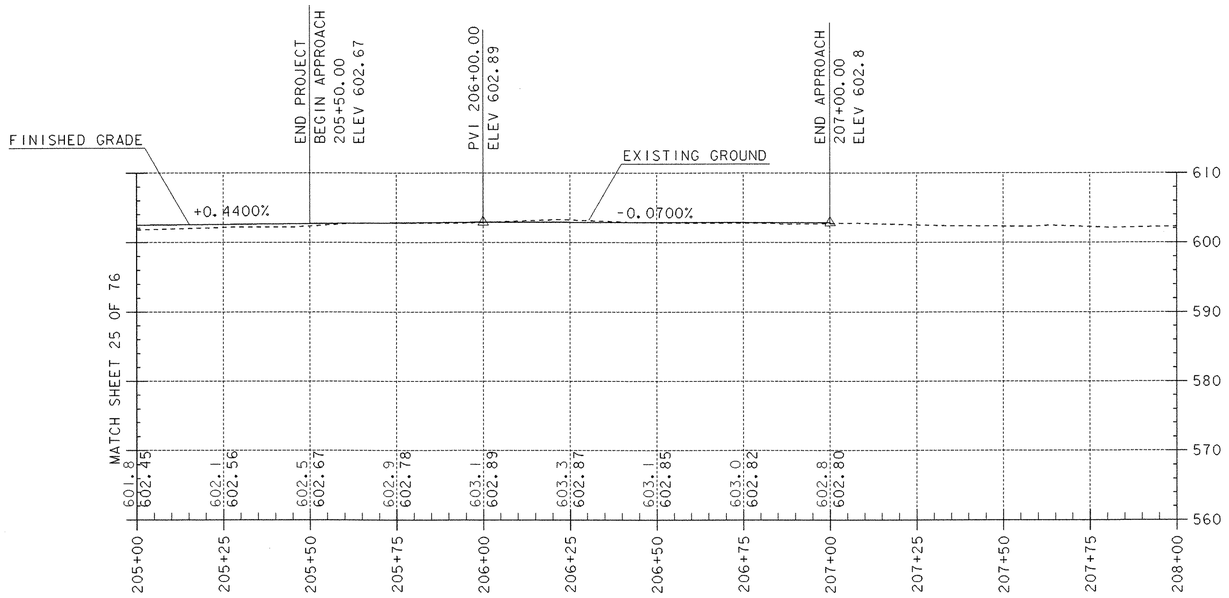

# VT 103 PROFILE 1

1" = 10' V
1" = 20' H

10 FT 0
20 FT 0

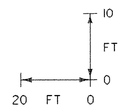
**DATUM**
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

| | |
|---|---|
| PROJECT: CHESTER | PROJECT NO.: BRF 025-1(35) |
| DESIGN FILE NAME: M:\ 1549101VAOT Chester Curv\HWY\DRAW\zf134xs5.dgn | |
| IPARM FILE NAME: zf134pf1.i | PLOT DATE: 28-MAY-2003 |
| SURVEYED BY: SHERIDAN | SURVEY DATE: 8/90 |
| SQUAD LEADER: PORTALUPI | DRAWN BY: T. LACKEY |
| | SHEET: 24 OF 79 |




# VT 103 PROFILE 2

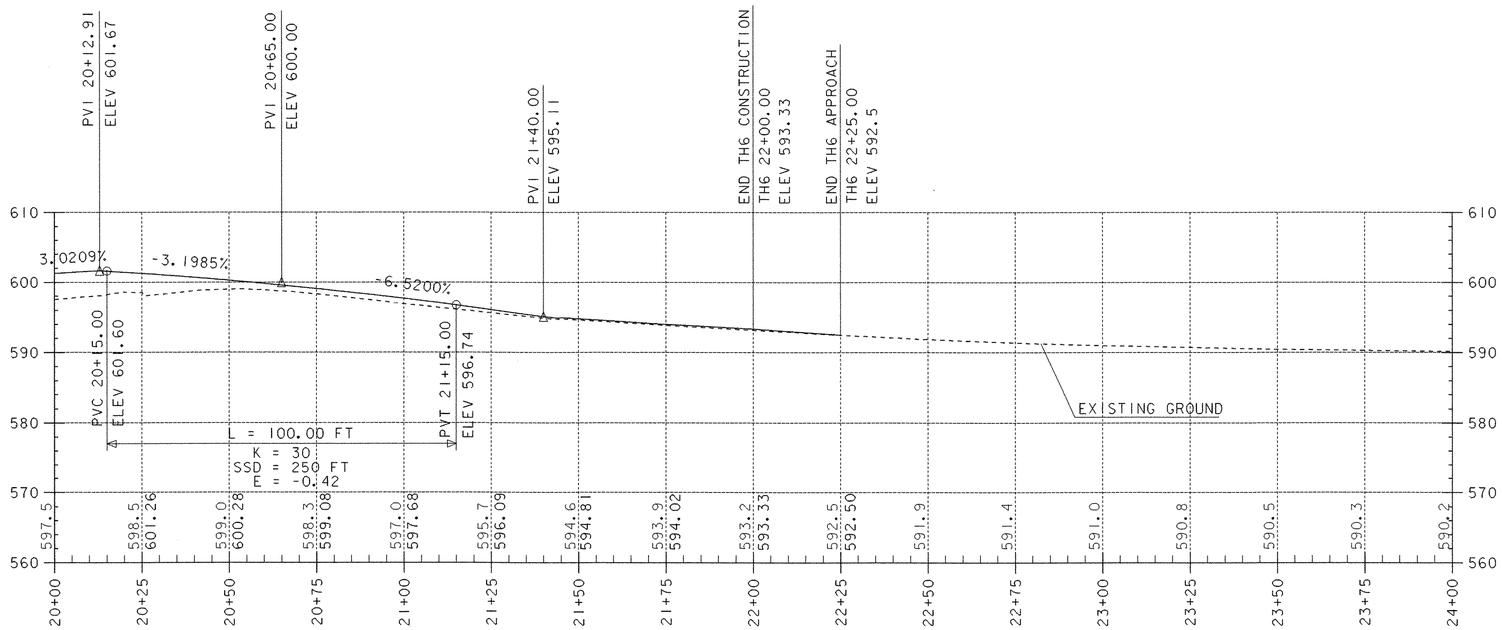
1" = 10' V
1" = 20' H




**DATUM**

VERTICAL NGVD 1929
HORIZONTAL NAD 1928

| | |
|---|---|
| PROJECT: CHESTER | PROJECT NO.: BRF 025-1(35) |
| DESIGN FILE NAME: M:\ 15491\01\VAOT Chester Curv\HWY\DRAW\zfl34xs5.dgn | |
| IPARM FILE NAME: zfl34pf2.i | PLOT DATE: 28-MAY-2003 |
| SURVEYED BY: SHERIDAN | SURVEY DATE: 8/90 |
| SOUAD LEADER: PORTALUPI | DRAWN BY: T. LACKEY |
| | SHEET: 25 OF 79 |




# TH 6 PROFILE 1

1" = 10' V
1" = 20' H

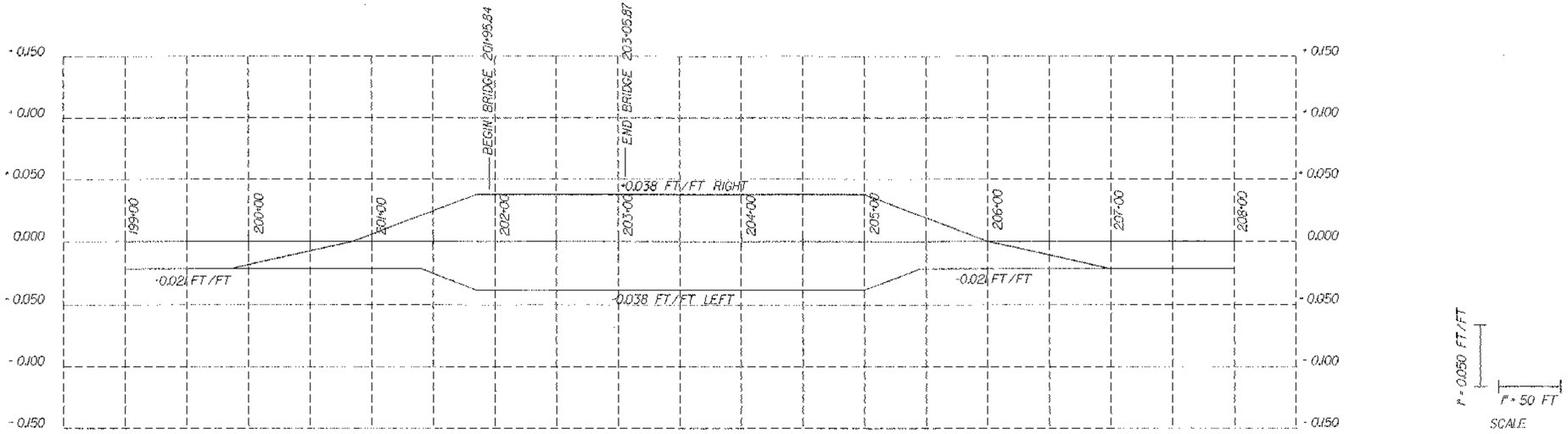
10 FT 0
20 FT 0

**DATUM**
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

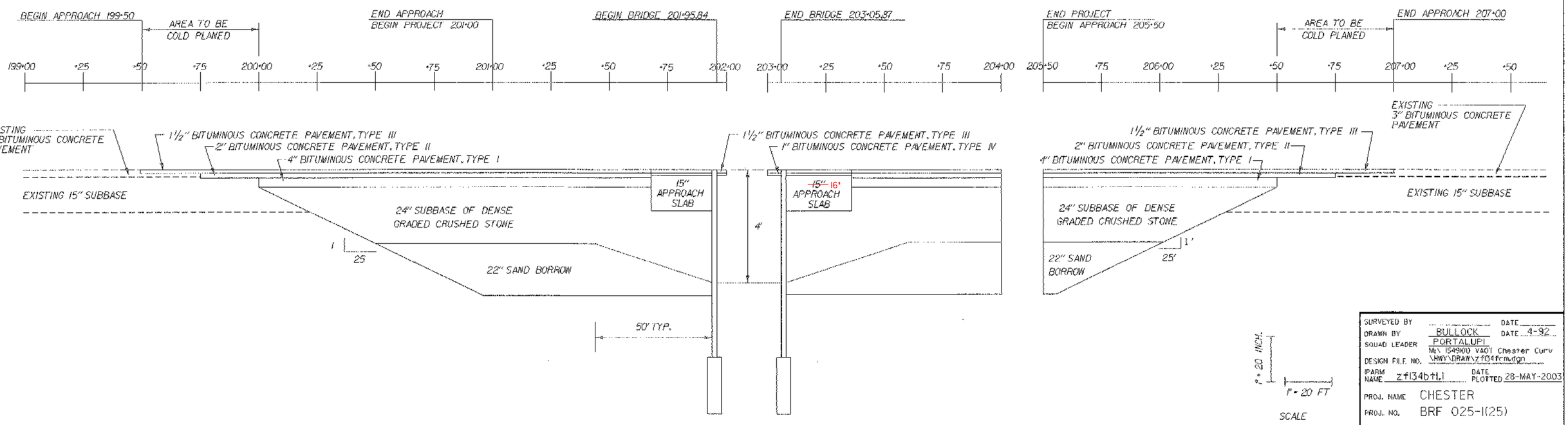
| PROJECT: | PROJECT NO.: |
|---|---|
| CHESTER | BRF025-1(35) |

DESIGN FILE NAME: M:\87bl34\Structures\zfl34xs5.dgn
IPARM FILE NAME: zfl34pf3.i
SURVEYED BY: SHERIDAN
SQUAD LEADER: PORTALUPI
PLOT DATE: 28-MAY-2003
SURVEY DATE: 8/90
DRAWN BY: L. BULLOCK
SHEET: 26 OF 76

# MAINLINE BANKING TRANSITION DIAGRAM

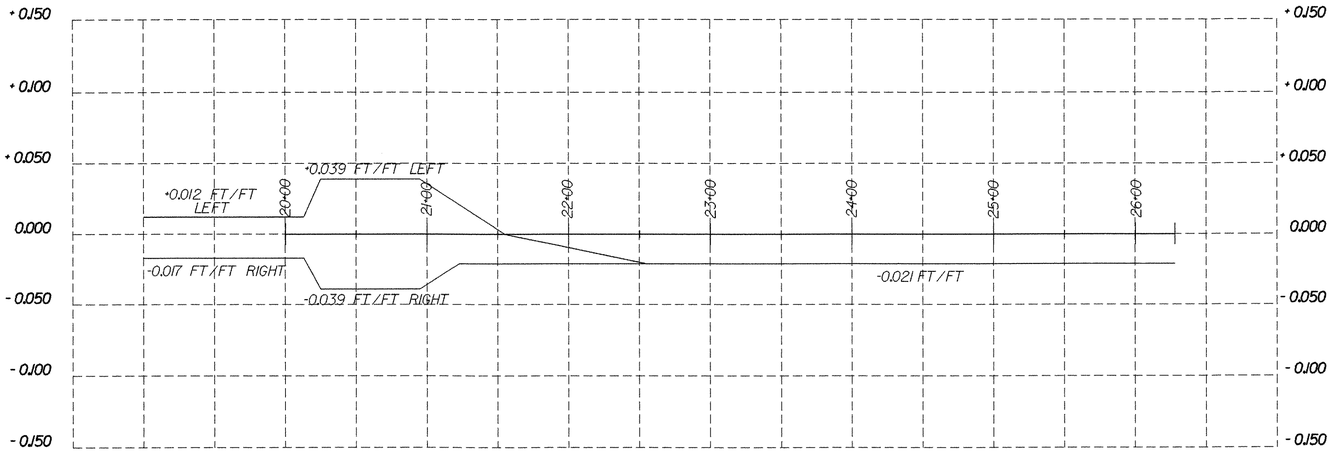



# MAINLINE MATERIAL TRANSITION DIAGRAM




SURVEYED BY _____ DATE _____
DRAWN BY BULLOCK DATE 4-92
SQUAD LEADER PORTALUPI
DESIGN FILE NO. M:\ 1549100 VA01 Chester Curv \HWY\DRAW\zf134frm.dgn
IPARM NAME zf134bt1.i DATE PLOTTED 28-MAY-2003
PROJ. NAME CHESTER
PROJ. NO. BRF 025-1(25)
SHEET 27 OF 79 SHEETS

# TH #6 BANKING TRANSITION DIAGRAM



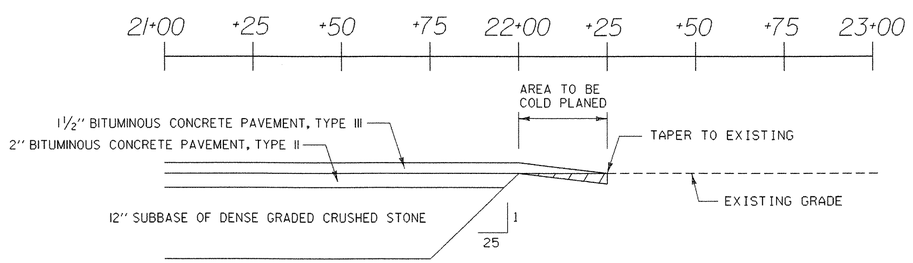

1" = 0.050 FT/FT

1" = 50 FT

SCALE

# TH #6

# TH #6 MATERIAL TRANSITION DIAGRAM




1" = 10 INCHES

1" = 20 FT

SCALE

SURVEYED BY SHERIDAN DATE 8-90

DRAWN BY rdrown DATE 4-92

SQUAD LEADER PORTALUPI

DESIGN FILE NO. M:\ 154900 VAOT Chester Curv \HWY\DRAW\zfl34frm.dgn

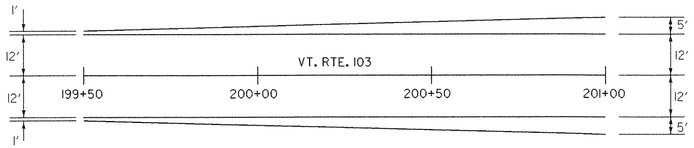
IPARM NAME zfl34bt2.i DATE PLOTTED 28-MAY-2003

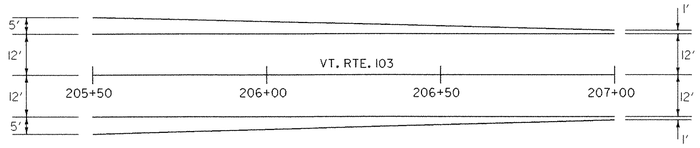
PROJ. NAME CHESTER

PROJ. NO. BRF025-I(35)

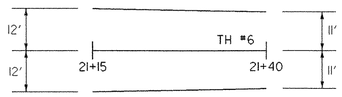
SHEET 28 OF 79 SHEETS

# APPROACH TRANSITION DETAILS

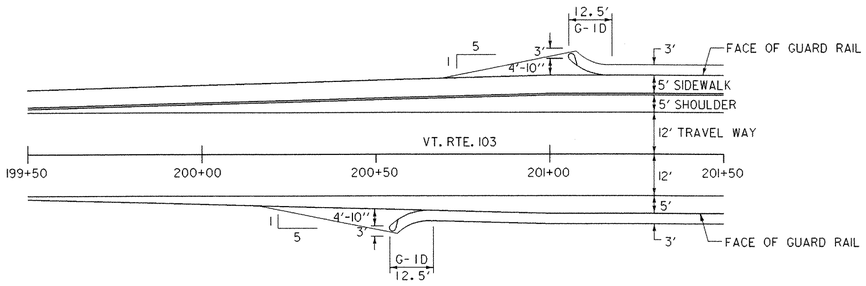


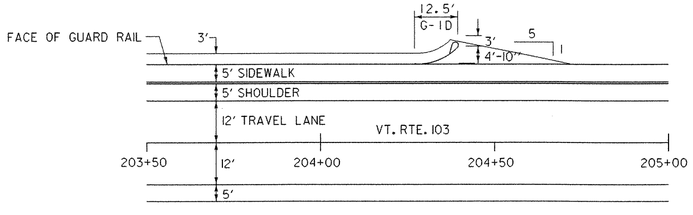



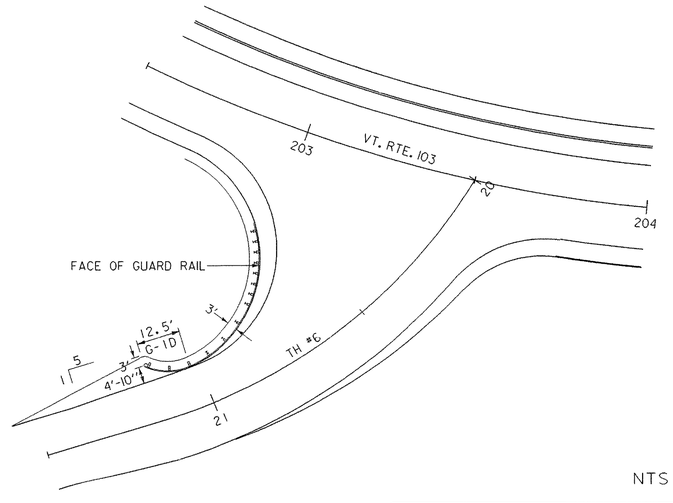

# TH #6 TRANSITION DETAIL




# GUARD RAIL DETAILS




NTS

**DATUM**

VERTICAL N/A

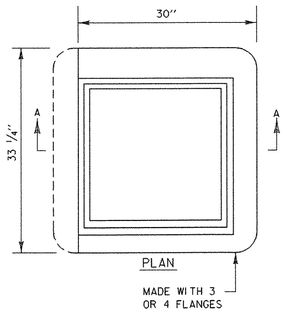
HORIZONTAL N/A

| PROJECT: CHESTER | PROJECT NO.: BRF 025-1(35) |
|---|---|
| DESIGN FILE NAME: M:\ 1549100 VAOT Chester Curv\HWY\DRAW\zf134frm.dgn | |
| IPARM FILE NAME: zf134dtl.i | PLOT DATE: 28-MAY-2003 |
| SURVEYED BY: SHERIDAN | SURVEY DATE: 8/90 |
| SQUAD LEADER: PORTALUPI | DRAWN BY: L. BULLOCK |
| | SHEET: 29 OF 79 |

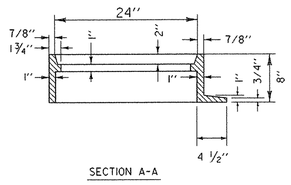
NOTE: THIS FRAME TO BE PLACED IN DROP INLET TOP BEFORE CONCRETE IS POURED.

4 FLANGES UNLESS OTHERWISE INDICATED.

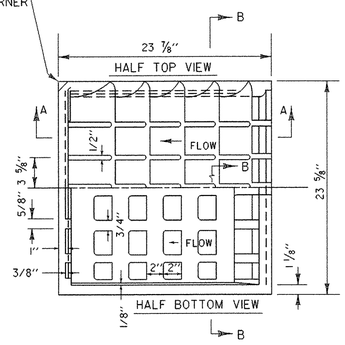
FRAMES TO BE FURNISHED WITH 3 FLANGES WHEH USED IN CONJUNCTION WITH CURB OR AS DIRECTED BY THE ENGINEER.



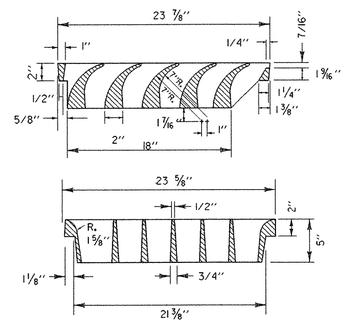

# FRAME FOR TYPE E GRATE

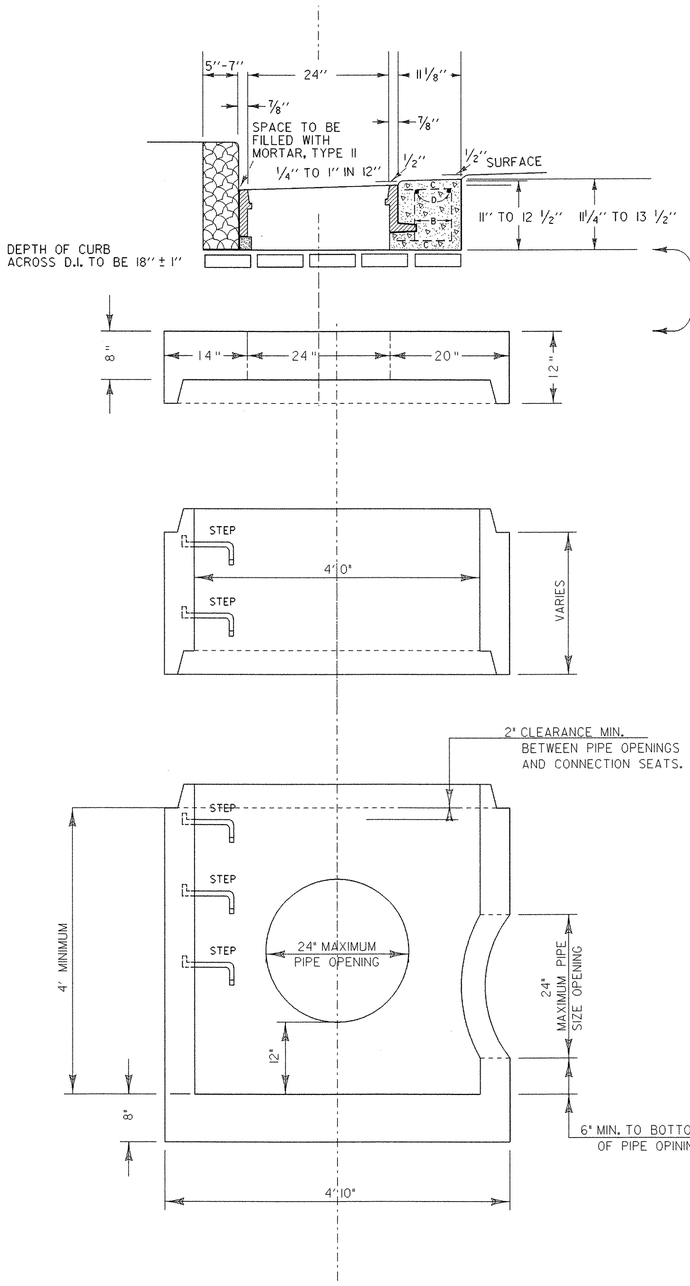



THIS CORNER LEFT OFF FOR "RIGHT" GRATE, DIAG. OPPOSITE CORNER FOR "LEFT" GRATE, TO FIT IN KEYED FRAMES.




# TYPE E GRATE



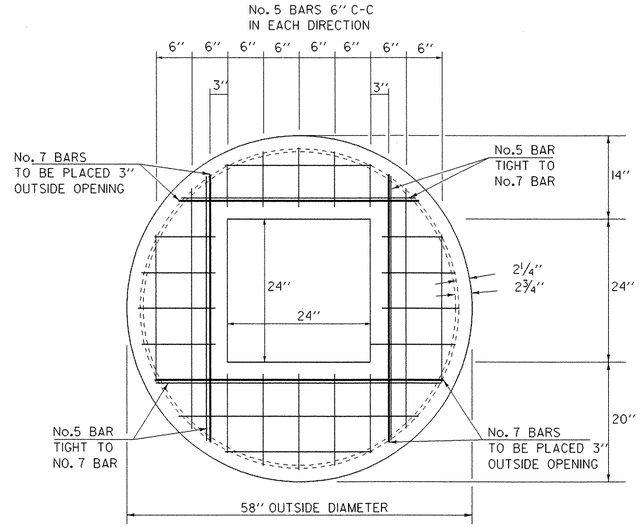




# DROP INLET DETAIL

THREE COURSES OF BUILDING BRICK, CONFORMING TO SECTION 705.01(c), OF THE VERMONT STANDARD SPECIFICATION FOR CONSTRUCTION, TO BE PLACED ON TOP OF CONCRETE STRUCTURE PRIOR TO PLACING FRAME TO FACILITATE CHANGING ELEVATION OF PRECAST RCP DROP INLET WHEN REQUIRED. BRICK TO BE INCLUDED IN THE BID PRICE FOR PRECAST RCP DROP INLET.

THREE COURSES OF BUILDING BRICK TO BE PLACED ON TOP OF CONCRETE STRUCTURE PRIOR TO PLACING FRAME TO FACILITATE CHANGING ELEVATION OF CATCH BASIN OR MANHOLE WHEN REQUIRED. BRICK TO BE INCLUDED IN THE BID PRICE FOR CATCH BASIN OR MANHOLE.

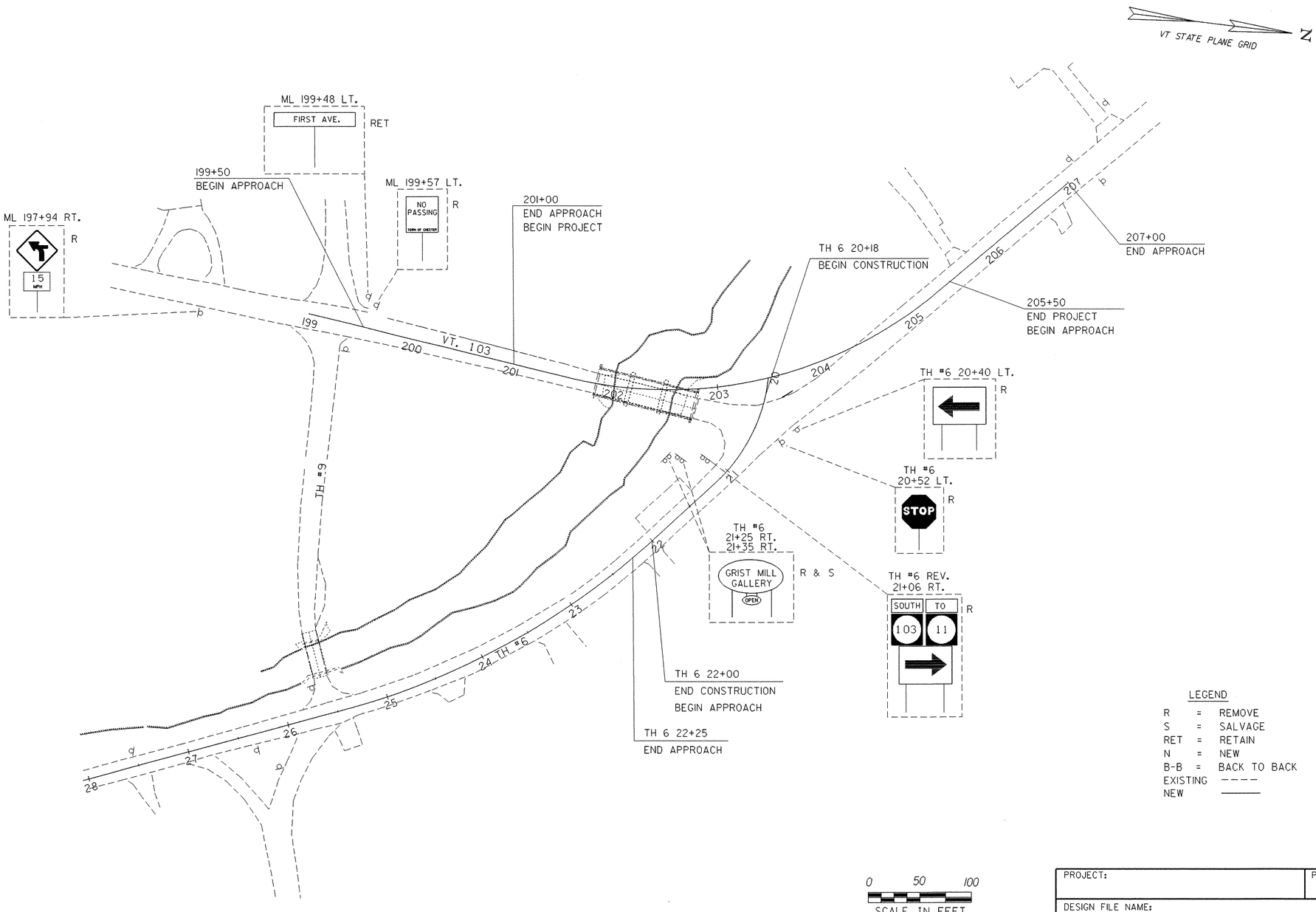
NOTE: SEE DROP INLET STANDARDS D-9, D-15 FOR ANY ADDITIONAL DETAILS AND OR DIMENSIONING.




# ADAPTER REINFORCING DETAILS

| PROJECT: CHESTER | PROJECT NO.: BRF 025-1(35) |
|---|---|
| DESIGN FILE NAME: 87bl34\structures\sfl34dl.dgn | |
| IPARM FILE NAME: sfl34dl.l | PLOT DATE: 28-MAY-2003 |
| SURVEYED BY: | SURVEY DATE: |
| SQUAD LEADER: A. PROTALUPI | DRAWN BY: G.ROKES |
| | SHEET: 30 OF 79 |

# EXISTING TRAFFIC SIGNS




LEGEND

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

0 50 100
SCALE IN FEET

| | |
|---|---|
| PROJECT: | PROJECT NO.: |
| DESIGN FILE NAME: | |
| IPARM FILE NAME: z:f134+cl.i | PLOT DATE: 28-MAY-2003 |
| SURVEYED BY: | SURVEY DATE: |
| SQUAD LEADER: | DRAWN BY: |
| TRAFFIC CONTROL SHEET 1 | SHEET: 31 OF 79 |

# FINAL TRAFFIC SIGNS AND PAVEMENT MARKING SHEET

**4" WHITE LINE**

TH #6 20+81 RT. - TH #6 22+25 RT.
TH #6 20+81 RT. - ML 202+61 RT. (35' RADIUS)
TH #6 20+48 LT. - TH #6 22+25 LT.
TH #6 20+48 LT. - ML 203+72 RT. (75' RADIUS)

**TEMPORARY 4" WHITE LINE**

TH #6 20+81 RT. - TH #6 22+25 RT.
TH #6 20+81 RT. - ML 202+61 RT. (35' RADIUS)
TH #6 20+48 LT. - TH #6 22+25 LT.
TH #6 20+48 LT. - ML 203+72 RT. (75' RADIUS)

**DURABLE 4" YELLOW**

ML 199+50 ℄ - ML 203+04 ℄ (DOUBLE)
ML 203+44 ℄ - ML 207+00 ℄ (DOUBLE)

**LETTER OR SYMBOL**

TH #6 20+30 LT. - TH #6 20+38 LT. (STOP)

**4" YELLOW LINE**

TH #6 20+30 ℄ - TH #6 22+25 ℄ (DOUBLE)

**TEMPORARY 4" YELLOW LINE**

TH #6 20+30 ℄ - TH #6 22+25 ℄ (DOUBLE)

**PAINTED CURB**

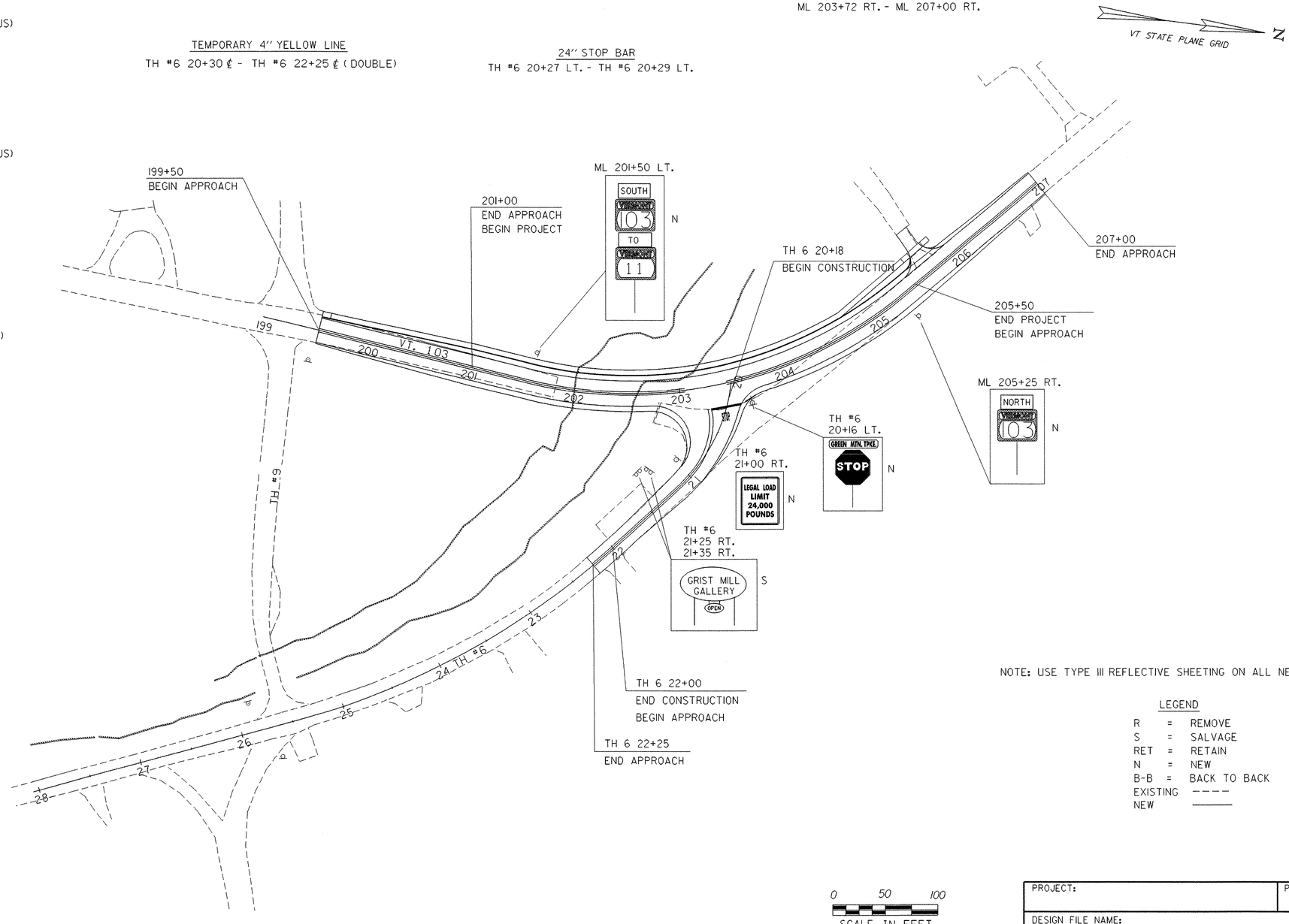
ML 199+50 LT. - ML 205+63 LT.

**24" STOP BAR**

TH #6 20+27 LT. - TH #6 20+29 LT.

**DURABLE 4" WHITE LINE**

ML 199+50 LT. - ML 207+00 LT.
ML 199+67 RT. - ML 202+61 RT.
ML 203+72 RT. - ML 207+00 RT.




NOTE: USE TYPE III REFLECTIVE SHEETING ON ALL NEW ROADWAY SIGNS.

LEGEND

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

0 50 100
SCALE IN FEET

| | |
|---|---|
| PROJECT: | PROJECT NO.: |
| DESIGN FILE NAME:<br>IPARM FILE NAME: zf134tc2.i<br>SURVEYED BY:<br>SQUAD LEADER:<br>TRAFFIC CONTROL SHEET 2 | PLOT DATE: 28-MAY-2003<br>SURVEY DATE:<br>DRAWN BY:<br>SHEET: 32 OF 79 |

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

# TRAFFIC SIGN SUMMARY SHEET

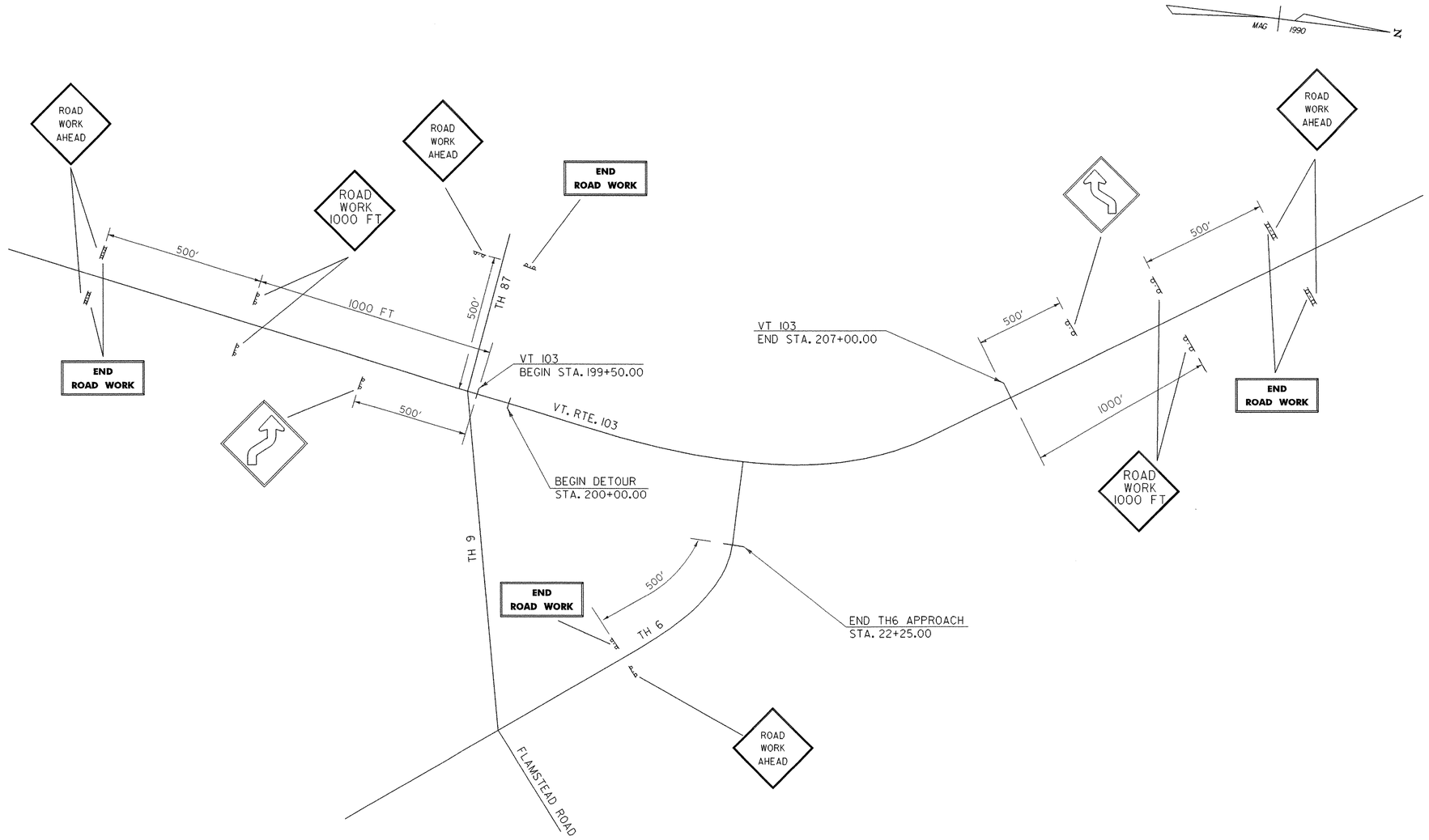
| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (in) | HEIGHT (in) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | EXIST POST SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL lb/ft 1.12 | 2.0 | 3.0 | SQUARE STEEL (in) 1.75 | 2.0 | 2.5 | ANCHOR | SLEEVE | SQUARE STEEL lb/ft 1.88 | 2.16 | 3.35 | TUBULAR ALUMINUM Ø (in) 3.0 | 4.0 | 4.0 MOD | TUBULAR ALUMINUM lb/ft 1.3 | 1.7 | 1.7 | TUBULAR STEEL FOUNDATION | TUBULAR STEEL Ø (in) 3.0 | 3.5 | 4.0 | 5.0 | TUBULAR STEEL lb/ft 7.6 | 9.0 | 10.8 | 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | W-SHAPE STEEL WEIGHT | W-SHAPE STEEL POST SIZE | SIGN FRAME REQUIRED | REMARKS | SIGN DETAIL DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ML 201+50 LT. | SOUTH | | 24" | 12" | 2 | | | | | | 1 | | | X | | | X | | | | | | | | | | | | | | | | | | | | | | | | | SIGN ID CODE M3-3 | | E-136B |
| | VERMONT 103 | | 30" | 24" | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SIGN ID CODE M1-5 | | E-136B |
| | TO | | 24" | 12" | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SIGN ID CODE M4-5 | | E-136B |
| | VERMONT 11 | | 24" | 24" | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SIGN ID CODE M1-5 | | E-136B |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TH 6 20+16 LT. | GREEN MTN. TPKE. | | 42" | 6" | 1.75 | | | | | | 1 | | | X | | | X | | | | | | | | | | | | | | | | | | | | | | | | | SEE STD. FOR STREET NAME SIGNS | | E-123 |
| | STOP | | 30" | 30" | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SIGN ID CODE R1-1 | | E-143 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TH 6 21+00 RT. | LEGAL LOAD LIMIT 24,000 POUNDS | | 24" | 30" | 5 | | | | | | 1 | | | X | | | X | | | | | | | | | | | | | | | | | | | | | | | | | SIGN ID CODE VR-017 | | E-141 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TH 6 21+25 RT. | GRIST MILL GALLERY | | | | | | 1 | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TH 6 21+35 RT. | GRIST MILL GALLERY | | | | | | 1 | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ML 205+25 RT. | NORTH | | 24" | 12" | 2 | | | | | | 1 | | | X | | | X | | | | | | | | | | | | | | | | | | | | | | | | | SIGN ID CODE M3-1 | | E-136B |
| | VERMONT 103 | | 30" | 24" | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | SIGN ID CODE M1-5 | | E-136B |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | FT | FT | FT 66 | FT | FT | FT 66 | | EA | LB | LB | LB | | | | LB | LB | LB | LB | | | | | | | | | | | | | |
| **TOTALS** | | SF 31 | SF | EA. 2 | SF | | | | | | | FT 66 | | | FT 66 | | | | | LB | | | EA. | LB | | | | EA. | EA. | LB | | | | | | | | | | | |

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE TRAFFIC & SAFETY DIVISION'S "SIGN POST DESIGN GUIDELINE."

PROJECT: CHESTER
PROJECT NO.: BRF 025-1(35)

DESIGN FILE NAME: M:\ 1549100 VAOT Chester Curv\HWY\DRAW\zf134frm.dgn
IPARM FILE NAME: zf134tc3. i
SURVEYED BY: SHERIDAN
SQUAD LEADER: PORTALUPI
TRAFFIC CONTROL SHEET 3
PLOT DATE: 28-MAY-2003
SURVEY DATE: 08-90
DRAWN BY: L. BULLOCK
SHEET: 33 OF 79

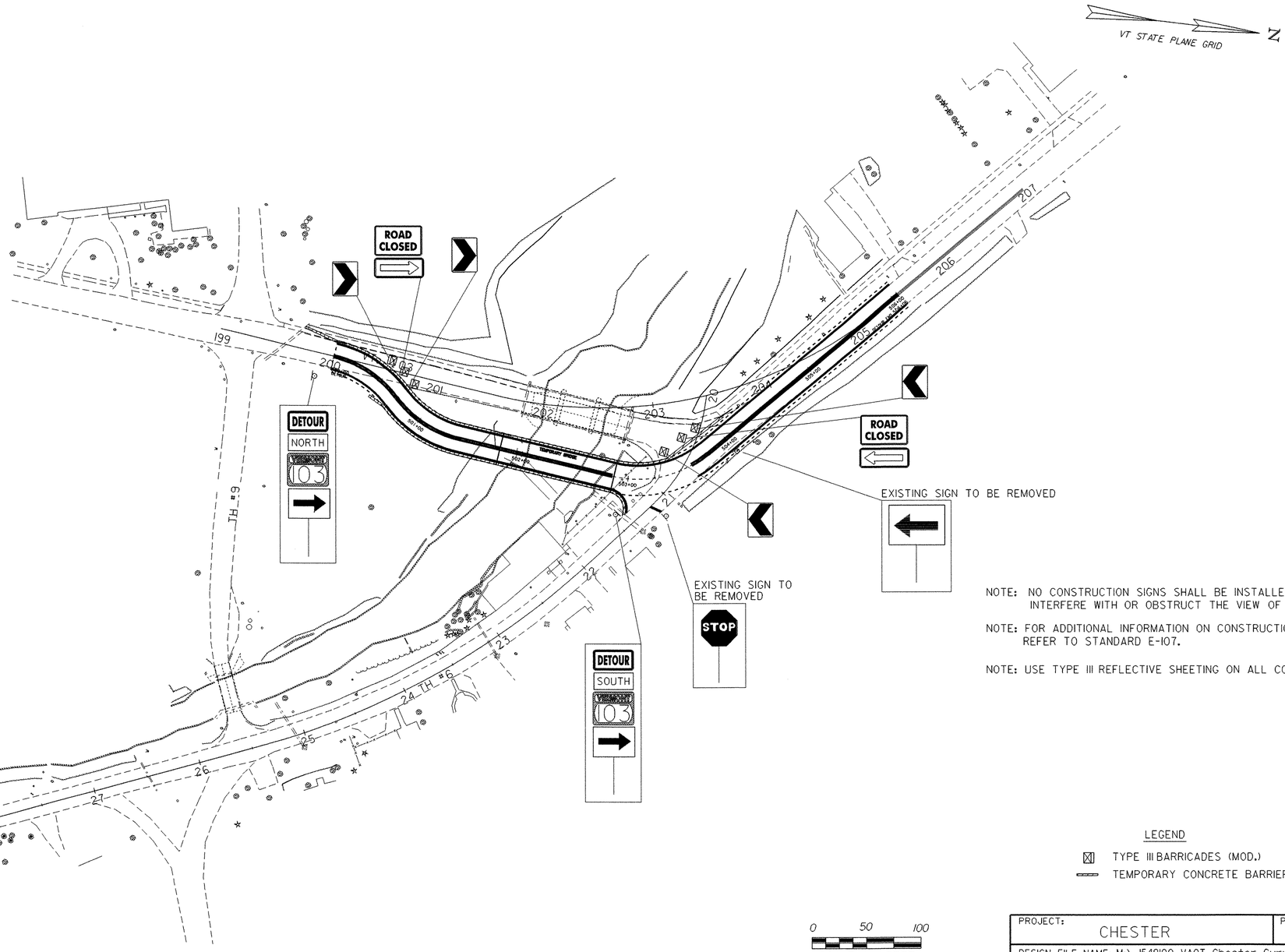
# CONSTRUCTION APPROACH SIGNING




NOT TO SCALE

| | |
|---|---|
| PROJECT: CHESTER | PROJECT NO.: BRF 025-1(35) |
| DESIGN FILE NAME: M:\ 154900 VAOT-Chester Curv\HWY\DRAW\zf134frm.dgn | |
| IPARM FILE NAME: zf134tc4.i | PLOT DATE: 28-MAY-2003 |
| SURVEYED BY: SHERIDAN | SURVEY DATE: 08-90 |
| SQUAD LEADER: PORTALUPI | DRAWN BY: L. BULLOCK |
| TRAFFIC CONTROL SHEET 4 | SHEET: 34 OF 79 |

# DETOUR PAVEMENT MARKING AND SIGNING
# (CONSTRUCTION OF VT. 103)




NOTE: NO CONSTRUCTION SIGNS SHALL BE INSTALLED SO AS TO INTERFERE WITH OR OBSTRUCT THE VIEW OF EXISTING TRAFFIC.

NOTE: FOR ADDITIONAL INFORMATION ON CONSTRUCTION APPROACH SIGNING REFER TO STANDARD E-107.

NOTE: USE TYPE III REFLECTIVE SHEETING ON ALL CONSTRUCTION SIGNS.

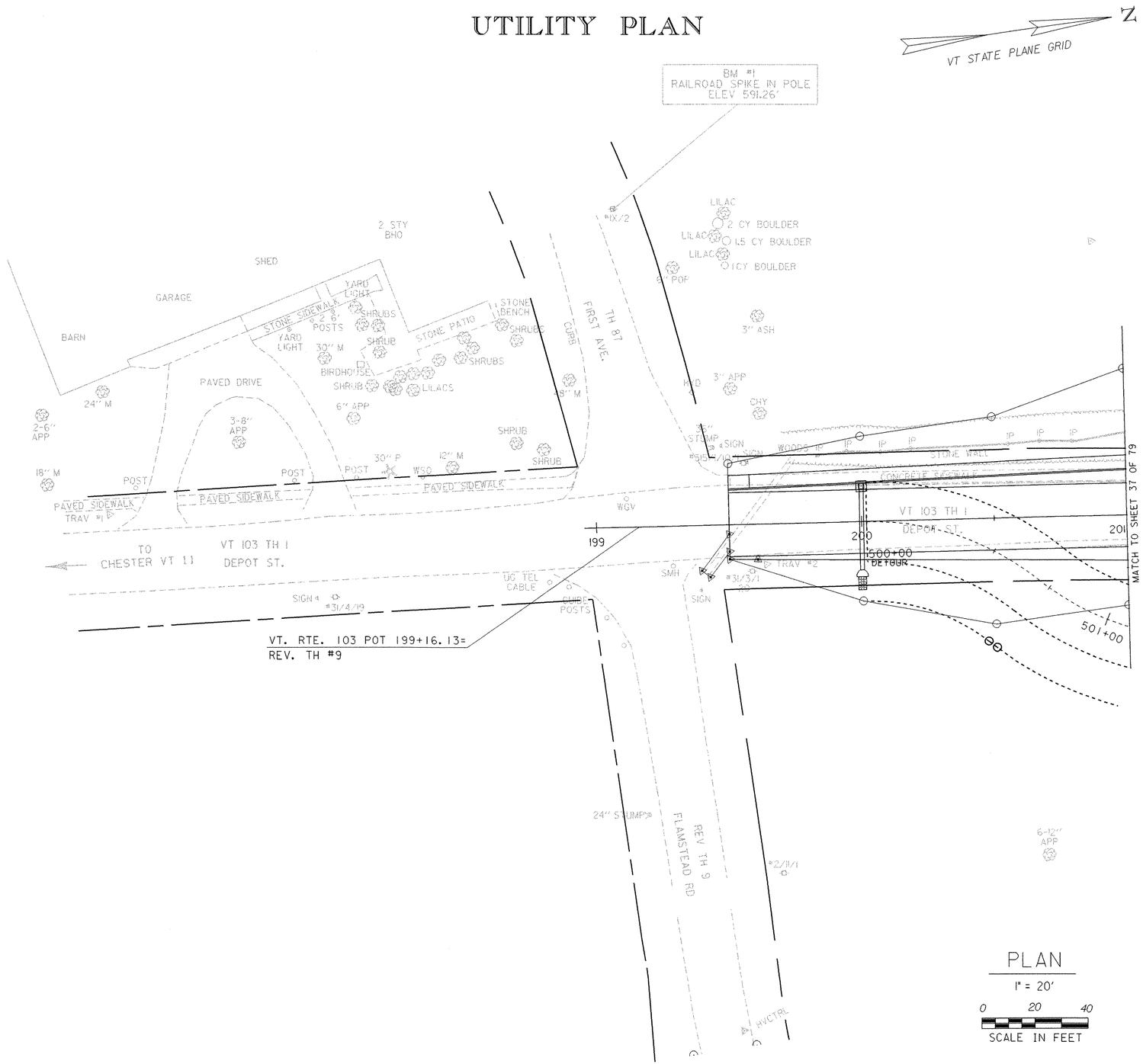
LEGEND

- TYPE III BARRICADES (MOD.)
- TEMPORARY CONCRETE BARRIER

0 50 100
SCALE IN FEET

| | |
|---|---|
| PROJECT: CHESTER | PROJECT NO.: BRF 025-1(35) |
| DESIGN FILE NAME: M:\ 154100 VAOT Chester Curv\HWY\DRAW\zf134frm.dgn | |
| IPARM FILE NAME: zf134tc5.i | PLOT DATE: 28-MAY-2003 |
| SURVEYED BY: SHERIDAN | SURVEY DATE: 08-90 |
| SQUAD LEADER: PORTALUPI | DRAWN BY: L. BULLOCK |
| TRAFFIC CONTROL SHEET 5 | SHEET: 35 OF 79 |

# UTILITY PLAN




PLAN

1" = 20'

0 20 40

SCALE IN FEET

DATUM

VERTICAL NGVD 1929

HORIZONTAL NAD 1927

SURVEYED BY SHERIDAN DATE 08-90

DRAWN BY L. BULLOCK DATE 11-90

SQUAD LEADER PORTALUPI

DESIGN FILE NO. M:\ 154910\VAOT-Chester Curv \HWY\DRAW\zf134bdr.dgn

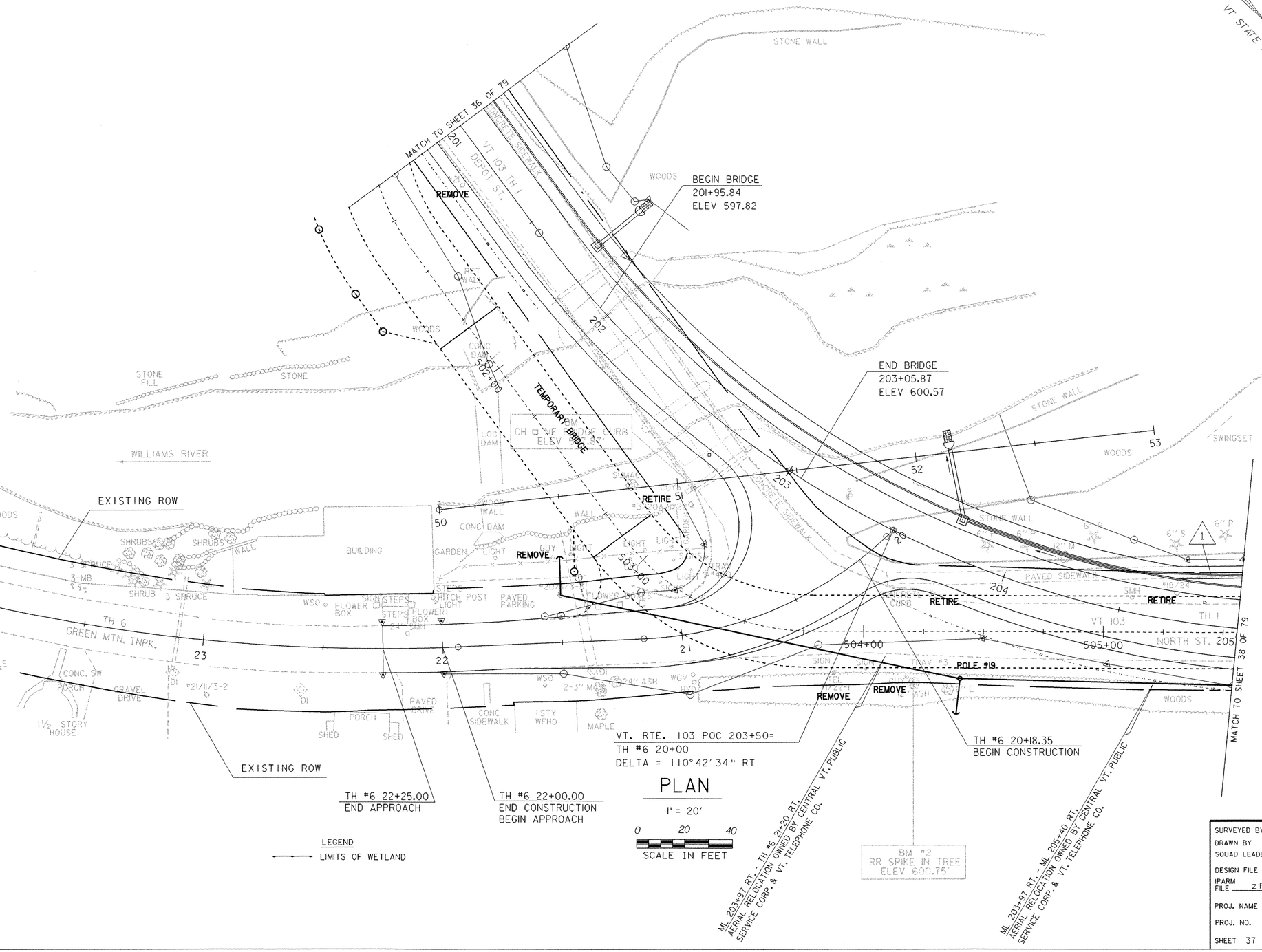
PRF FILE zf134util.1 DATE PLOTTED 28-MAY-2003

PROJ. NAME CHESTER

PROJ. NO. BRF 025-1(35)

SHEET 36 OF 79 SHEETS

# UTILITY SHEET




## PLAN

1" = 20'

0 20 40

SCALE IN FEET

LEGEND

LIMITS OF WETLAND

**DATUM**

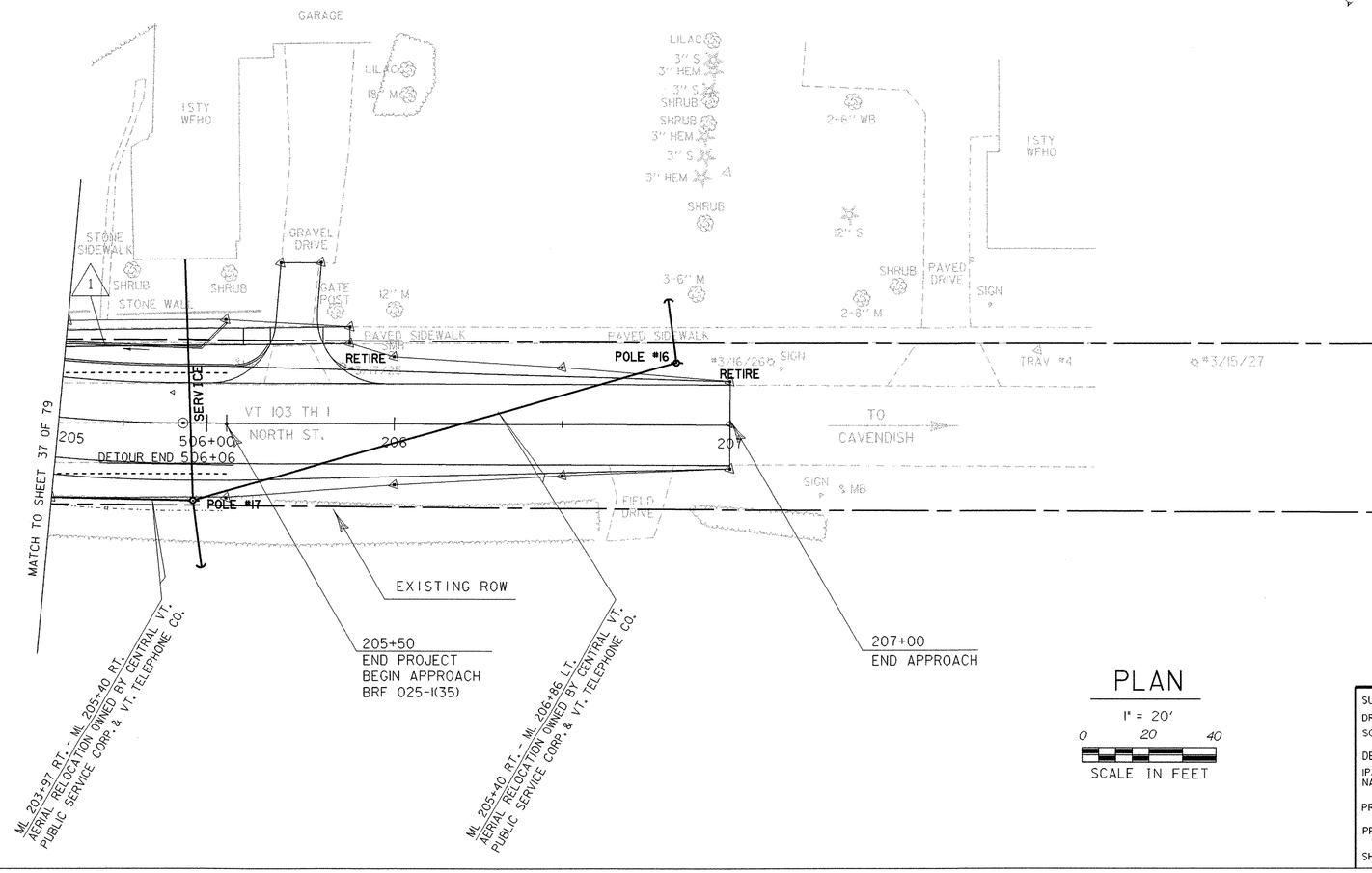
VERTICAL NGVD 1929

HORIZONTAL NAD 1927

| | | | |
|---|---|---|---|
| SURVEYED BY | GILMAN | DATE | 12/92 |
| DRAWN BY | L. BULLOCK | DATE | 1/93 |
| SQUAD LEADER | PORTALUPI | | |
| DESIGN FILE NO. | M:\ 1549101VAOT-Chester Curv \HWY\DRAW\zf134bdr.dgn | | |
| IPARM FILE | zf134ut2.1 | DATE PLOTTED | 28-MAY-2003 |
| PROJ. NAME | CHESTER | | |
| PROJ. NO. | BRF 025-1(35) | | |

SHEET 37 OF 79 SHEETS

# UTILITY SHEET




PLAN

1" = 20'

0 20 40

SCALE IN FEET

**DATUM**

VERTICAL NGVD 1929

HORIZONTAL NAD 1927

SURVEYED BY SHERIDAN DATE 08-90

DRAWN BY L. BULLOCK DATE 11-90

SQUAD LEADER PORTALUPI

DESIGN FILE NO. M:\ 154901\VAOT-Chester Curv\HWY\DRAW\zf134bdr.dgn

IPARM NAME zf134ut3.1 DATE PLOTTED 28-MAY-2003

PROJ. NAME CHESTER

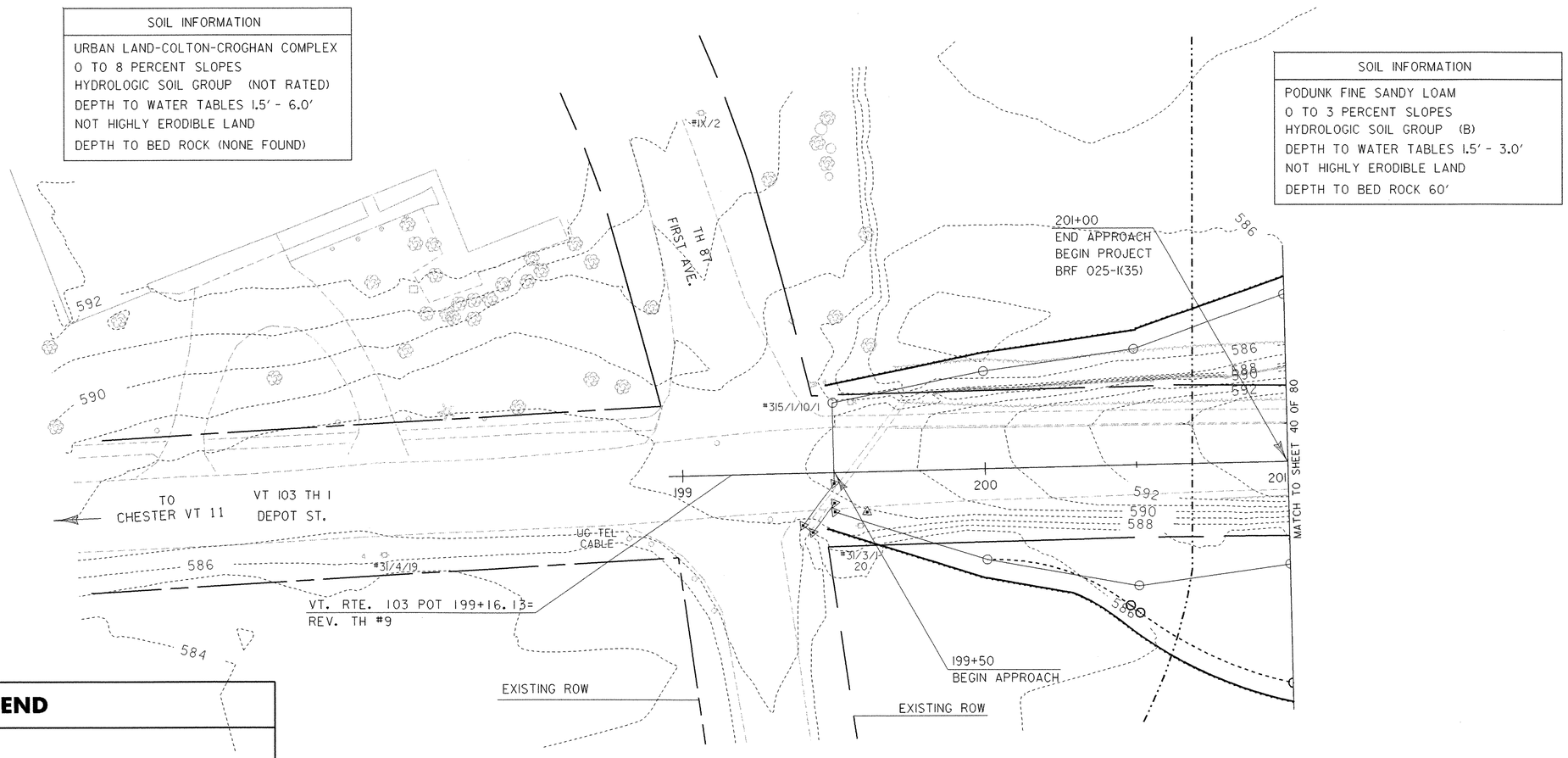
PROJ. NO. BRF 025-1(35)

SHEET 38 OF 79 SHEETS

# EROSION CONTROL
# EXISTING CONDITIONS & PERIMETER CONTROL PLAN 1

| SOIL INFORMATION |
|---|
| URBAN LAND-COLTON-CROGHAN COMPLEX |
| 0 TO 8 PERCENT SLOPES |
| HYDROLOGIC SOIL GROUP (NOT RATED) |
| DEPTH TO WATER TABLES 1.5' - 6.0' |
| NOT HIGHLY ERODIBLE LAND |
| DEPTH TO BED ROCK (NONE FOUND) |

| SOIL INFORMATION |
|---|
| PODUNK FINE SANDY LOAM |
| 0 TO 3 PERCENT SLOPES |
| HYDROLOGIC SOIL GROUP (B) |
| DEPTH TO WATER TABLES 1.5' - 3.0' |
| NOT HIGHLY ERODIBLE LAND |
| DEPTH TO BED ROCK 60' |




## LEGEND

- WETLANDS BOUNDARIES
- SILT FENCE
- SOIL BOUNDARIES
- PROPOSED CONSTRUCTION LIMITS
- STAKED IN PLACE HAY BALES

NOTE: SOIL PROPERTIES AND BOUNDARIES WERE APPROXIMATED BASED ON USDA SOIL SURVEY. ACTUAL FIELD CONDITIONS MAY VARY.

### PERIMETER CONTROL NOTES

1.) IDENTIFY SENSITIVE AREAS AND AREAS PRONE TO EROSION
2.) CLEARLY DEMARCATE AREAS TO AVOID DISTURBANCE
3.) PROTECT ALL SENSITIVE AREAS AND WATER FEATURES FROM SEDIMENT
4.) DIVERT OR OTHERWISE KEEP OFF-SITE "RUN-ON" FROM AREAS TO BE DISTURBED
5.) PERIMETER CONTROLS TO BE INSTALLED PRIOR TO SOIL DISTURBANCE AND MAINTAINED UNTIL SITE IS PERMANENTLY STABILIZED TO THE SATISFACTION OF THE ENGINEER AND ON-SITE COORDINATOR

DATUM
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

SURVEYED BY SHERIDAN DATE 08-90
DRAWN BY L. BULLOCK DATE 11-90
SQUAD LEADER PORTALUPI
DESIGN FILE NO. M:\ 154910I VAOT-Chester Curv \HWY\DRAW\zf134bdr.dgn
PRF FILE zf134erl.i DATE PLOTTED 28-MAY-2003
PROJ. NAME CHESTER
PROJ. NO. BRF 025-1(35)
SHEET 39 OF 79 SHEETS

# EROSION CONTROL PLAN
# EXISTING CONDITIONS & PERIMETER CONTROL PLAN 2

## LEGEND

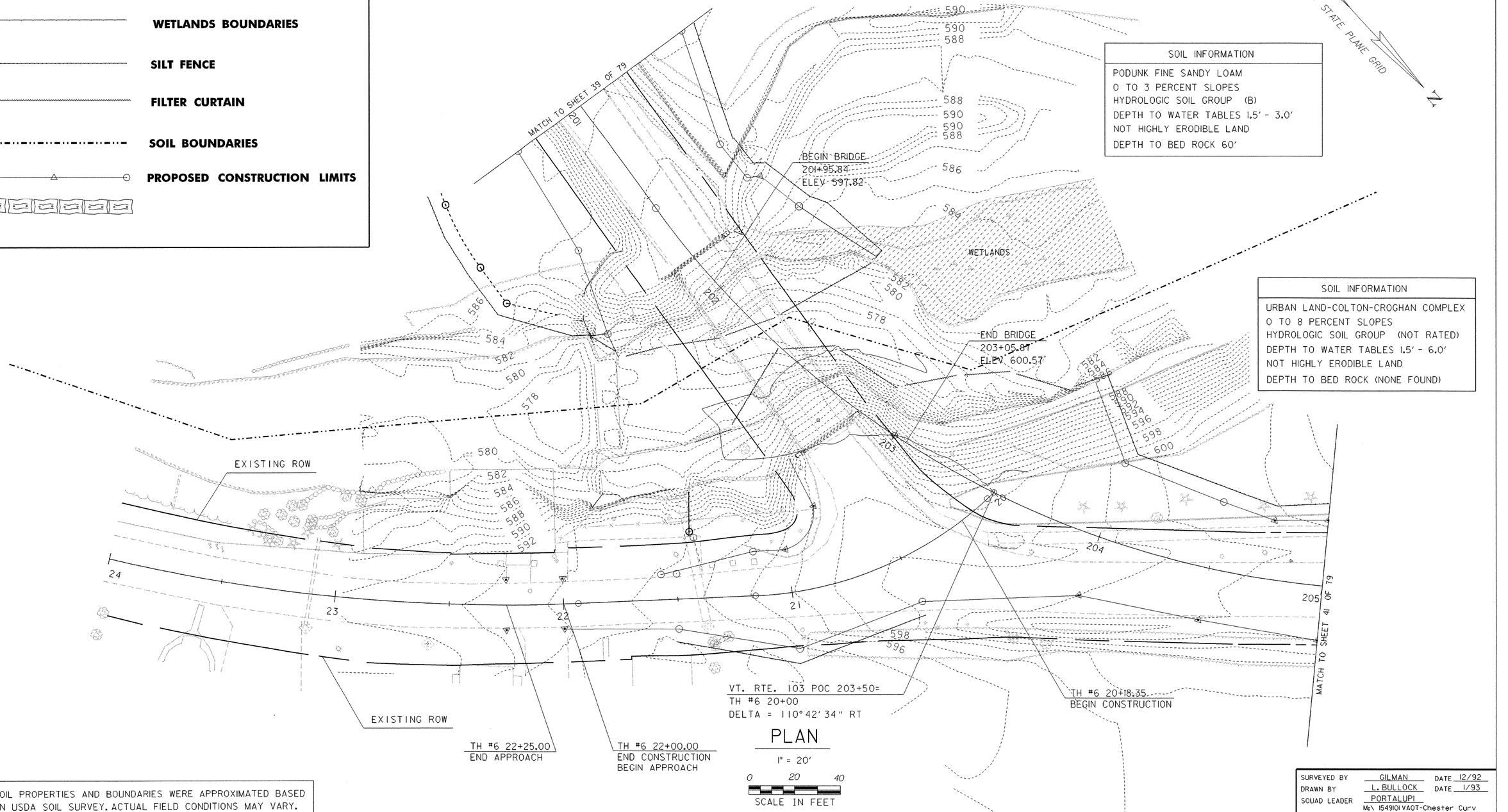
- WETLANDS BOUNDARIES
- SILT FENCE
- FILTER CURTAIN
- SOIL BOUNDARIES
- PROPOSED CONSTRUCTION LIMITS

VT STATE PLANE GRID

N

| SOIL INFORMATION |
|---|
| PODUNK FINE SANDY LOAM |
| 0 TO 3 PERCENT SLOPES |
| HYDROLOGIC SOIL GROUP (B) |
| DEPTH TO WATER TABLES 1.5' - 3.0' |
| NOT HIGHLY ERODIBLE LAND |
| DEPTH TO BED ROCK 60' |

| SOIL INFORMATION |
|---|
| URBAN LAND-COLTON-CROGHAN COMPLEX |
| 0 TO 8 PERCENT SLOPES |
| HYDROLOGIC SOIL GROUP (NOT RATED) |
| DEPTH TO WATER TABLES 1.5' - 6.0' |
| NOT HIGHLY ERODIBLE LAND |
| DEPTH TO BED ROCK (NONE FOUND) |




## PLAN

1" = 20'

0 20 40

SCALE IN FEET

NOTE: SOIL PROPERTIES AND BOUNDARIES WERE APPROXIMATED BASED ON USDA SOIL SURVEY. ACTUAL FIELD CONDITIONS MAY VARY.

**DATUM**

VERTICAL NGVD 1929

HORIZONTAL NAD 1927

SURVEYED BY GILMAN DATE 12/92

DRAWN BY L. BULLOCK DATE 1/93

SQUAD LEADER PORTALUPI

DESIGN FILE NO. M:\ 1549101VAOT-Chester Curv\HWY\DRAW\zf134bdr.dgn

IPARM FILE zf134er2.1 DATE PLOTTED 28-MAY-2003

PROJ. NAME CHESTER

PROJ. NO. BRF 025-1(35)

SHEET 40 OF 79 SHEETS

# EROSION CONTROL PLAN

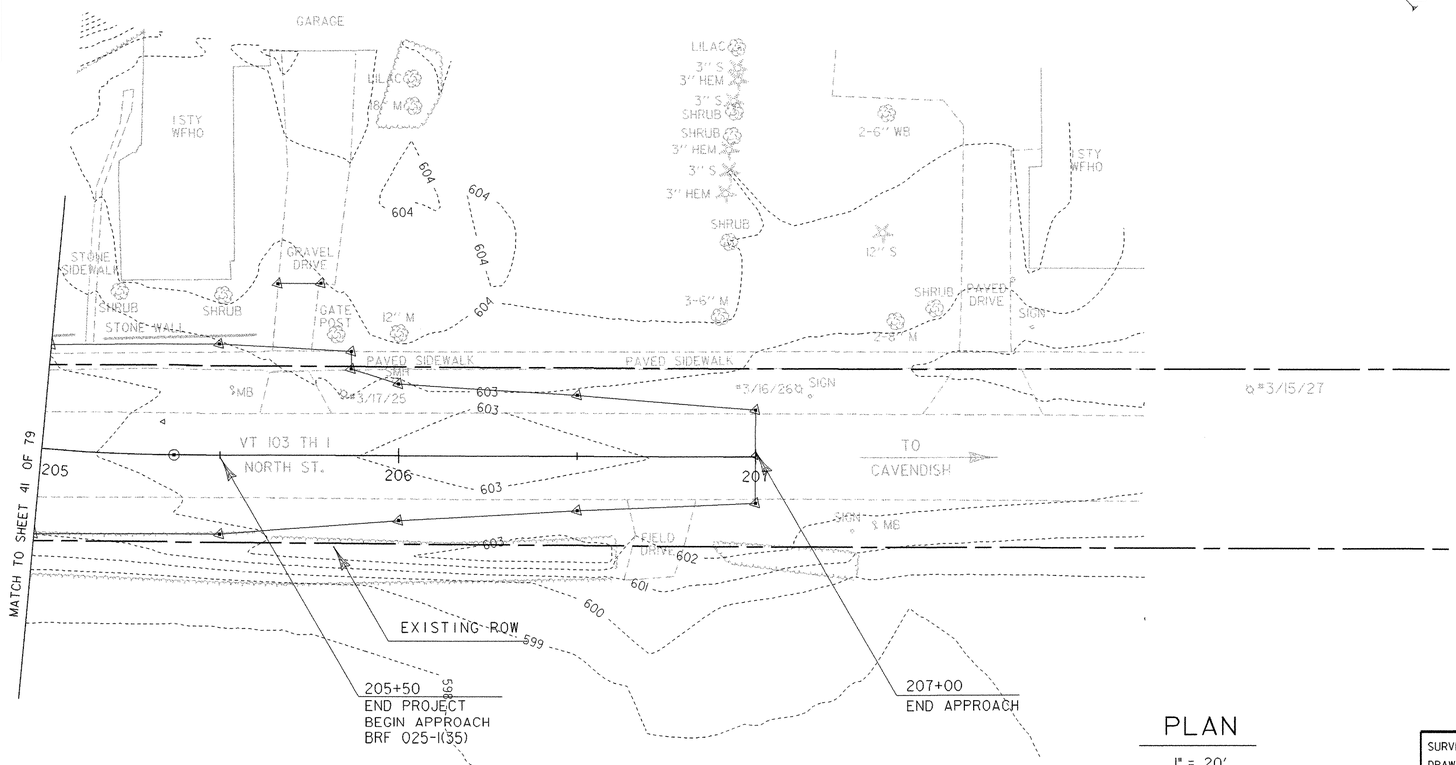
# EXISTING CONDITIONS & PERIMETER CONTROL PLAN 2

## LEGEND

- WETLANDS BOUNDARIES
- SILT FENCE
- FILTER CURTAIN
- SOIL BOUNDARIES
- PROPOSED CONSTRUCTION LIMITS
- STAKED IN PLACE HAY BALES

| SOIL INFORMATION (THIS ENTIRE SHEET) |
|---|
| URBAN LAND-COLTON-CROGHAN COMPLEX |
| 0 TO 8 PERCENT SLOPES |
| HYDROLOGIC SOIL GROUP (NOT RATED) |
| DEPTH TO WATER TABLES 1.5' - 6.0' |
| NOT HIGHLY ERODIBLE LAND |
| DEPTH TO BED ROCK (NONE FOUND) |

VT STATE PLANE GRID N




PLAN

1" = 20'

0 20 40

SCALE IN FEET

NOTE: SOIL PROPERTIES AND BOUNDARIES WERE APPROXIMATED BASED ON USDA SOIL SURVEY. ACTUAL FIELD CONDITIONS MAY VARY.

**DATUM**

VERTICAL NGVD 1929

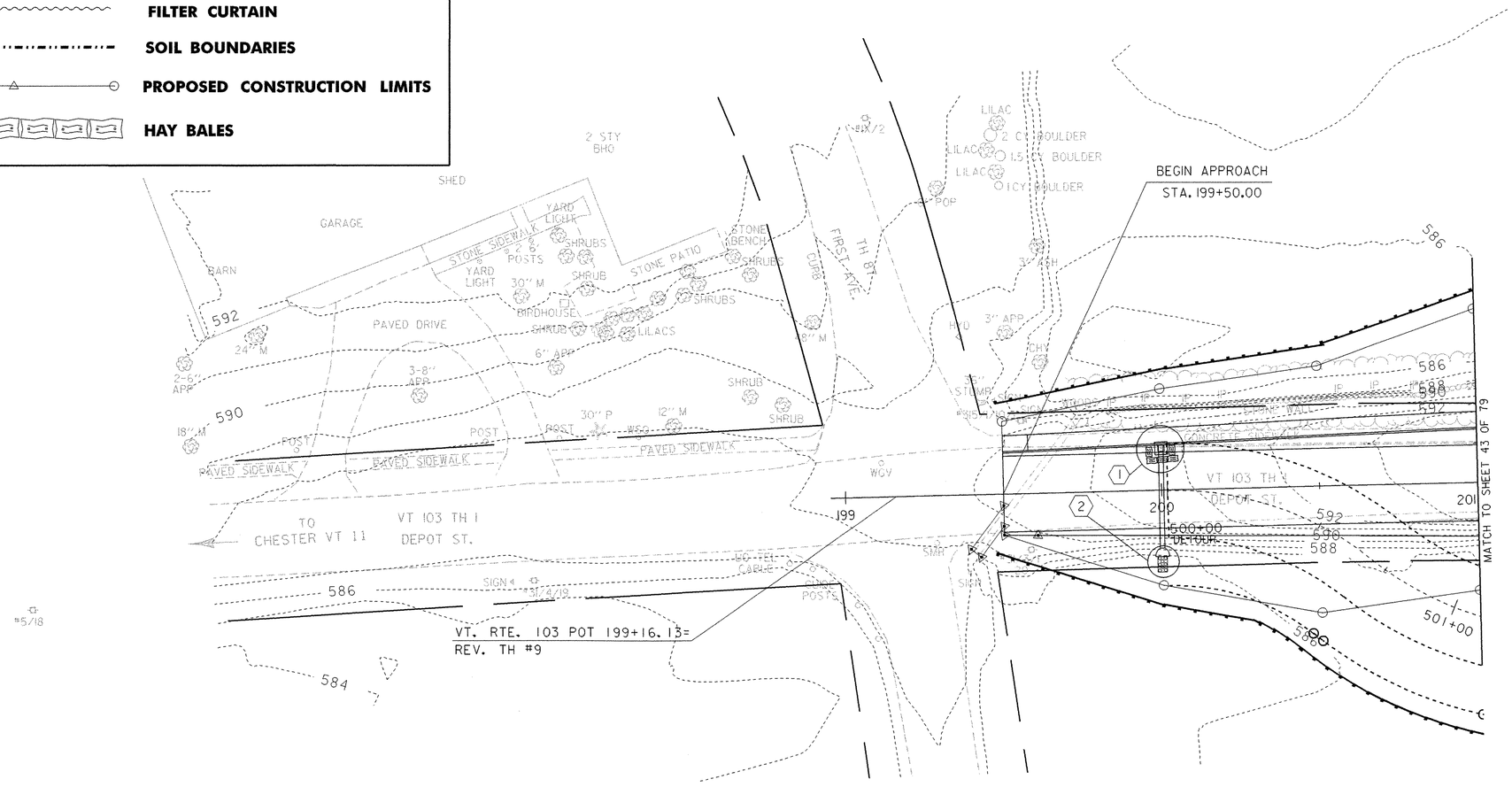
HORIZONTAL NAD 1927

| | | | |
|---|---|---|---|
| SURVEYED BY | SHERIDAN | DATE | 08-90 |
| DRAWN BY | L. BULLOCK | DATE | 11-90 |
| SQUAD LEADER | PORTALUPI | | |
| DESIGN FILE NO. | M:\ 1549101\VAOT-Chester Curv \HWY\DRAW\zf134bdr.dgn | | |
| IPARM NAME | zf134er3.i | DATE PLOTTED | 28-MAY-2003 |
| PROJ. NAME | CHESTER | | |
| PROJ. NO. | BRF 025-1(35) | | |
| SHEET 41 OF 79 SHEETS | | | |

# PROPOSED EROSION CONTROL SHEET 1

## LEGEND

- WETLANDS BOUNDARIES
- SILT FENCE
- FILTER CURTAIN
- SOIL BOUNDARIES
- PROPOSED CONSTRUCTION LIMITS
- HAY BALES




### EROSION AND SEDIMENT CONTROL SEQUENCE

| TASK | DATE REQ'D | TASK | DATE REQ'D |
|---|---|---|---|
| 1.) SET UP FIELD OFFICE AND CONTRACTOR STORAGE/WORKSITE LOCATION PROTECTED BY APPROPRIATE CONTROLS | | • SEED AND MULCH SIDE SLOPES | |
| 2.) INSTALL INITIAL EROSION CONTROL DEVICES INCLUDING SILT FENCE AND FILTER CURTAIN AS SHOWN | | 18.) REMOVE COFFERDAM | |
| 3.) CLEAR BRUSH, INSTALL GEOMATTING, AND BEGIN CONSTRUCTION OF TEMPORARY BRIDGE AND APPROACHES | X | 19.) REMOVE SEDIMENT POND(S) - LANDFILL AT APPROVED SITE | |
| • INSTALL HAY BALE AND STONE CHECK DAM PROTECTION AT CULVERT INLETS | | 20.) RESTORE STREAMBANK | X |
| 4.) BUILD AND LAUNCH TEMPORARY BRIDGE | | 21.) PLACE GEOFABRIC, STONE AND GRUBBING MATERIAL AS SHOWN | |
| 5.) COMPLETE TEMPORARY ROADWAY APPROACHES | | 22.) FORM / PLACE DECK AND APPROACH SLABS | |
| 6.) PLACE EROSION MATTING ON SLOPES GREATER THAN 1:3, HAY MULCH ALL OTHER DISTURBED AREAS | X | 23.) COMPLETE APPURTENANCES (GUARDRAIL, ETC.) | |
| 7.) SEED SIDE SLOPES WITH TEMPORARY SEED MIX | | 24.) INSTALL TEMPORARY PAVEMENT MARKINGS | |
| 8.) SHIFT TRAFFIC TO TEMPORARY BRIDGE | | 25.) REMOVE TEMPORARY BRIDGE | |
| 9.) COMPLETE JERSEY BARRIER ALONG TEMPORARY ROAD | | 26.) REMOVE TEMPORARY ROAD AND GEOTEXTILE | |
| 10.) REMOVE EXISTING BRIDGE - PROTECT STREAM FROM DEBRIS | | 27.) REMOVE GEOTEXTILE | |
| 11.) CONCRETE RUBBLE TO BE LANDFILLED AT A SITE APPROVED BY VTRANS ENV. SECTION | | 28.) RESTORE WETLAND USING APPROVED WETLAND SEED MIX | X |
| 12.) CONSTRUCT SEDIMENTATION / DEWATERING POND(S) | X | 29.) REMOVE INLET PROTECTION WORKS | |
| 13.) INSTALL SHEET PILING | | 30.) GRADE, SEED AND MULCH ALL REMAINING DISTURBED AREAS | X |
| 14.) COMPLETE EXCAVATION | | 31.) RETAIN INITIAL EC MEASURES THROUGH THE WINTER | |
| 15.) INSTALL CONCRETE CLEANOUT AREA | | 32.) INSTALL PAVEMENT WEAR COURSE | |
| 16.) FORM / PLACE FOOTINGS | | 33.) REMOVE INITIAL EROSION CONTROL MEASURES | |
| 17.) FORM / PLACE ABUTMENTS AND WINGWALLS - BACKFILL | X | | |
| • STRIP AND REMOVE PAVEMENT, GUARD RAILS ETC. - WASTE REMOVED TO APPROVED LOCATION | | | |
| • REMOVE SUBBASE - WATER TRUCK ON SITE FOR DUST CONTROL | | | |
| • PLACE NEW BASE COURSE TO LINE AND GRADE | | | |
| • REFORM / INSTALL DITCHES | | NOTE: MONITOR ALL EROSION CONTROL WEEKLY AND AFTER EACH RAINSTORM AND CORRECT AS NECESSARY | |
| • SHAPE AND GRADE SIDE SLOPES AS REQUIRED | | | |
| • INSTALL EROSION MATTING WHERE / AS REQUIRED | X | • DENOTES WORK THAT CAN BE PERFORMED CONCURRENTLY | |
| • INSTALL GUARD RAIL AS REQUIRED | | | |

### EROSION AND SEDIMENT CONTROL INDEX

| NO. | LOCATION | DESCRIPTION |
|---|---|---|
| ① | 200+00.00 LEFT | DROP INLET CONTROL (SEE STANDARD T-2) |
| ② | 200+00.00 RIGHT | OUTLET CONTROL (SEE DETAILS "J" ON SHEET 45 OF 79) |

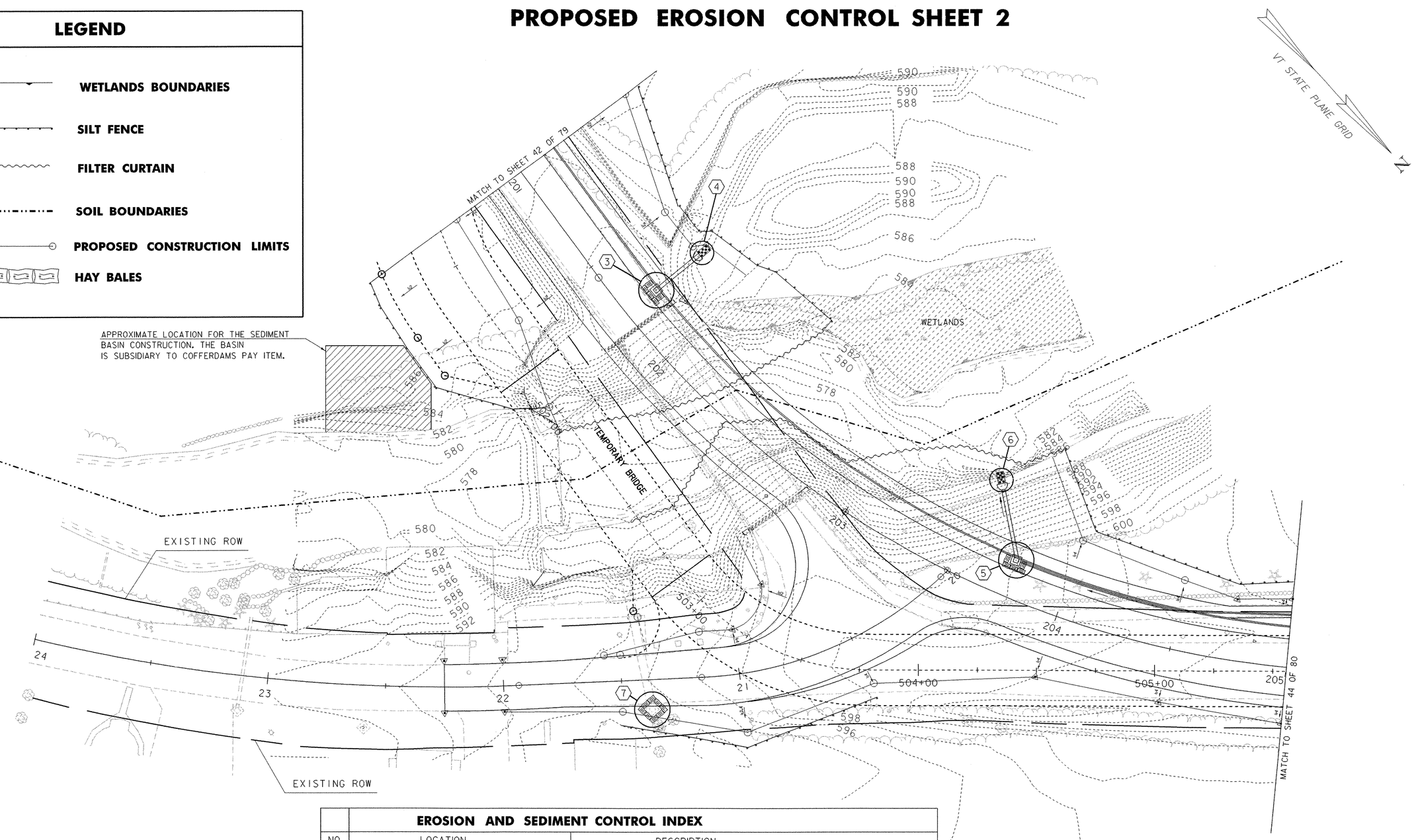
DATUM
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

SURVEYED BY SHERIDAN DATE 08-90
DRAWN BY L. BULLOCK DATE 11-90
SQUAD LEADER PORTALUPI
DESIGN FILE NO. M:\ 1549101\VAOT-Chester Curv\HWY\DRAW\zf134bdr.dgn
PRF FILE zf134er4.i DATE PLOTTED 28-MAY-2003
PROJ. NAME CHESTER
PROJ. NO. BRF 025-1(35)
SHEET 42 OF 79 SHEETS

# PROPOSED EROSION CONTROL SHEET 2

## LEGEND

- WETLANDS BOUNDARIES
- SILT FENCE
- FILTER CURTAIN
- SOIL BOUNDARIES
- PROPOSED CONSTRUCTION LIMITS
- HAY BALES




| | EROSION AND SEDIMENT CONTROL INDEX | |
|---|---|---|
| NO. | LOCATION | DESCRIPTION |
| | VT. 103 | |
| 3 | 201+75.00 LEFT | DROP INLET CONTROL (SEE STANDARD T-2) |
| 4 | 201+75.00 LEFT | OUT INLET CONTROL (SEE DETAIL "J" ON SHEET45 OF 79 ) |
| 5 | 203+75.00 LEFT | DROP INLET CONTROL (SEE STANDARD T-2) |
| 6 | 203+55.00 LEFT | OUT INLET CONTROL (SEE DETAIL "J" ON SHEET45 OF 79 ) |
| | TH 6 | |
| 7 | 21+37.30 LEFT | DROP INLET CONTROL (SEE STANDARD T-2) |

NOTE: ALL DISTURBED AREAS WITH SLOPES GREATER THAN 1:3 WILL REQUIRE TEMPORARY EROSION MATTING (SEE DETAILS "C","E1", AND "E2")

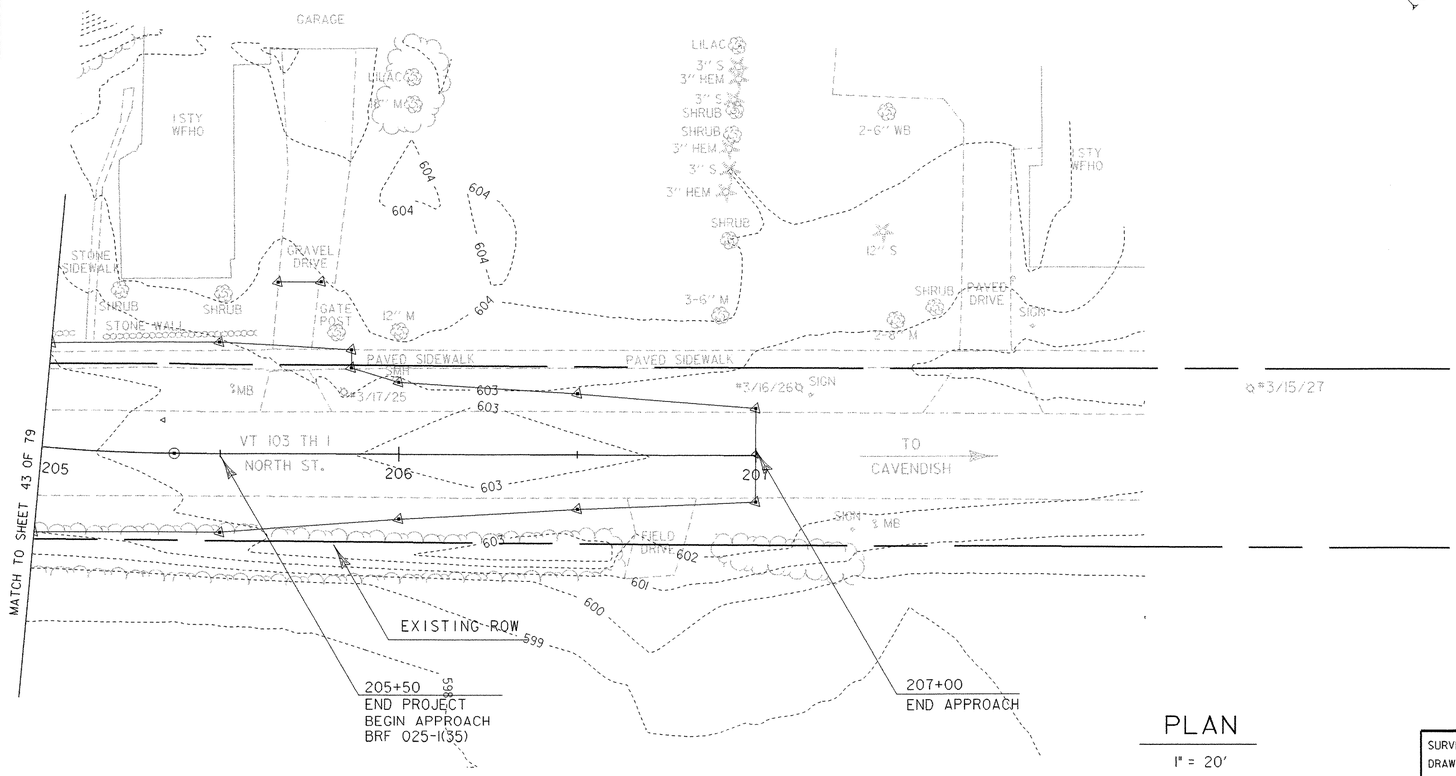
**DATUM**
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

SURVEYED BY GILMAN DATE 12/92
DRAWN BY L. BULLOCK DATE 1/93
SQUAD LEADER PORTALUPI
DESIGN FILE NO.
IPARM FILE zf134er5.1 DATE PLOTTED 28-MAY-2003
PROJ. NAME CHESTER
PROJ. NO. BRF 025-1(35)
SHEET 43 OF 79 SHEETS

# PROPOSED EROSION CONTROL SHEET 3

## LEGEND

- WETLANDS BOUNDARIES
- SILT FENCE
- FILTER CURTAIN
- SOIL BOUNDARIES
- PROPOSED CONSTRUCTION LIMITS
- HAY BALES




PLAN

1" = 20'

0 20 40

SCALE IN FEET

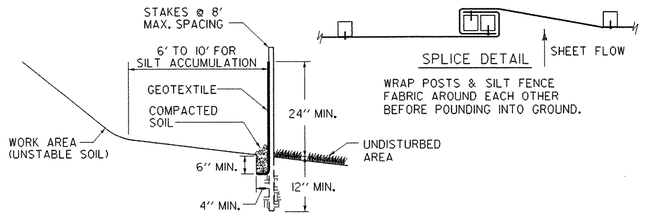
NOTE: SOIL PROPERTIES AND BOUNDARIES WERE APPROXIMATED BASED ON USDA SOIL SURVEY. ACTUAL FIELD CONDITIONS MAY VARY.

**DATUM**

VERTICAL NGVD 1929

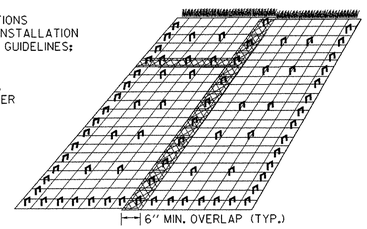
HORIZONTAL NAD 1927

| | | | |
|---|---|---|---|
| SURVEYED BY | SHERIDAN | DATE | 08-90 |
| DRAWN BY | L. BULLOCK | DATE | 11-90 |
| SQUAD LEADER | PORTALUPI | | |
| DESIGN FILE NO. | M:\ 1549101 VAOT-Chester Curv \HWY\DRAW\zf134bdr.dgn | | |
| IPARM NAME | zf134er6.i | DATE PLOTTED | 28-MAY-2003 |
| PROJ. NAME | CHESTER | | |
| PROJ. NO. | BRF 025-1(35) | | |
| SHEET | 44 OF 79 SHEETS | | |



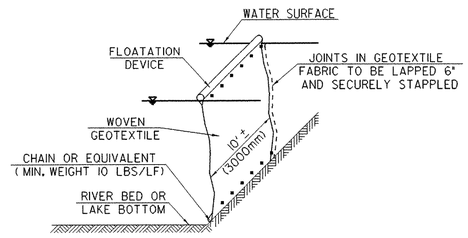

## SILT FENCE

NOTES :
1. DO NOT USE SILT FENCE IN STREAMS, DRAINAGE DITCHES, OR AREAS OF CONCENTRATED FLOW.
2. BACK WITH STAKED-IN-PLACE HAY BALES OR WIRE FENCE IF ADDITIONAL SUPPORT IS NEEDED.
3. MUST BE REMOVED WHEN SOIL IS STABILIZED.



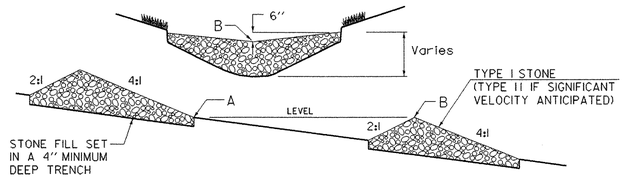

NOTES:
1. FOLOW MANUFACTURERS RECOMMENDATIONS AND PROVIDE LITERATURE DECRIBING INSTALLATION PROCEDURES OR USE THE FOLLOWING GUIDELINES:
2. ALL FABRIC OVERLAPS SHALL BE 6" MINIMUM WITH STAPLES EVERY 20".
3. STAPLE EDGES OF FABRIC EVERY 12".
4. USE 40' MAX. STAPLE SPACING IN OTHER AREAS.
5. SEE "EROSION MATTING FOR DITCHES" DETAIL FOR ANCHORING AT TOPS OF SLOPES.

## EROSION MATTING FOR SLOPES STEEPER THAN 1:3



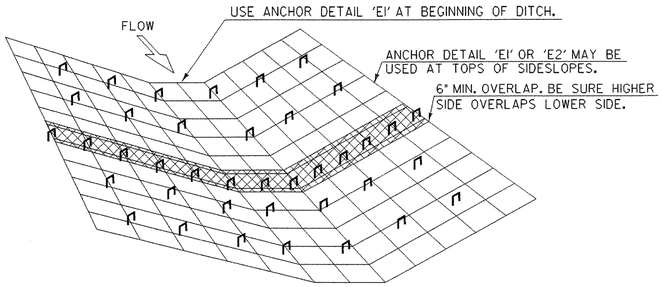

## FILTER CURTAIN

1. NOT TO BE USED ACROSS THE FLOW OF WATER
2. HEIGHT SHOULD BE SUFFICIENT TO ALLOW FOR VARIATIONS IN THE BOTTOM AND RISING WATER
3. ANCHOR FIRMLY IN PLACE AS NEEDED
4. INSTALL PRIOR TO EARTH DISTURBING ACTIVITIES AND/ OR INSTALLATION OF COFFERDAM WHERE APPLICABLE
5. LEAVE IN PLACE UNTIL UP-SLOPE AREAS ARE STABLE AND COFFERDAM IS REMOVED
6. USE CARE DURING REMOVAL TO PREVENT THE RELEASE OF CAPTURED SEDIMENT AS MUCH AS POSSIBLE



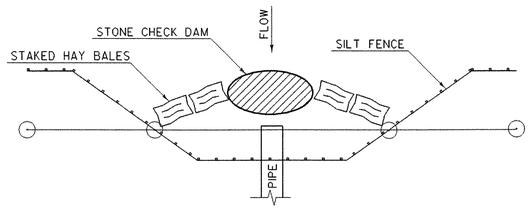

## TEMPORARY STONE CHECK DAM

NOTES :
1. CHECK DAMS TO BE USED DURING ESTABLISHMENT OF GRASS LINED DRAINAGE DITCHES
2. LOCATE DOWNSTREAM STRUCTURE SUCH THAT POINT "B" IS APPROXIMATELY LEVEL WITH THE LOWEST GROUND ELEVATION "A" OF THE UPSTREAM STRUCTURE.

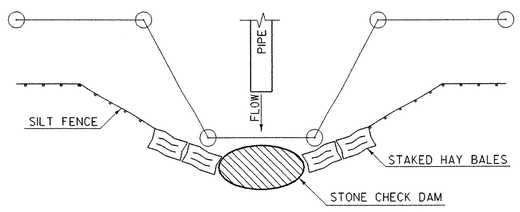



## EROSION MATTING FOR DITCHES

1. TO BE USED WHERE SLOPE OF DITCHLINE EXCEEDS 5%
2. OVERLAPS SHALL BE 6" MINIMUM IN THE DIRECTION OF FLOW AND STAPLED EVERY 20' MIN. THROUGH BOTH FABRICS.
3. USE 40' MAX STAPLE SPACING IN OTHER AREAS.



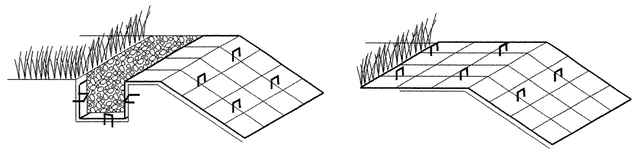

## EXISTING PIPE INLET CONTROL




## EXISTING PIPE OUTLET CONTROL

NOTE: REFER TO LATEST REVISIONS OF VERMONT STATE STANDARDS "T-1" AND "T-2" AND THE "VERMONT HANDBOOK FOR SOIL EROSION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" FOR ADDITIONAL EROSION CONTROL MEASURES.

HAY BALES AND SILT FENCE ARE NOT TO BE USED ACROSS AREAS OF CONCENTRATED FLOW.



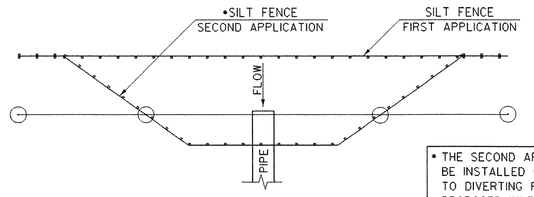
### ANCHOR DETAIL 'E1'

INSERT & STAPLE FABRIC INTO 6" X 6" TRENCH PRIOR TO BACKFILLING & COMPACTING SOIL. USE 3 STAPLE PATTERN EVERY 20".

### ANCHOR DETAIL 'E2'

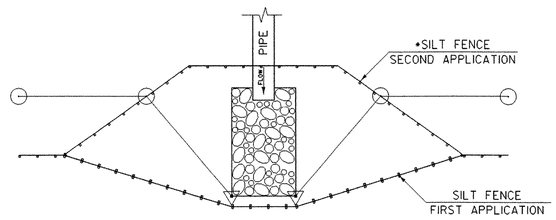
IF THE TOP OF SLOPE IS RELATIVELY FLAT EXTEND MATERIAL APPROXIMATELY 24" AND STAPLE EVERY 20" MINIMUM.

## ANCHOR DETAILS FOR EROSION MATTING




• THE SECOND APPLICATION OF SILT FENCE IS TO BE INSTALLED (REMOVE FIRST APPLICATION) PRIOR TO DIVERTING FLOW INTO NEW PIPE FOR BOTH PROPOSED INLET AND OUTLET CONTROLS

## PROPOSED PIPE INLET CONTROL




## PROPOSED PIPE OUTLET CONTROL

NOTE: ALL DRAWINGS NOT TO SCALE

## EROSION & SEDIMENT CONTROL DETAILS

PROJECT NAME: CHESTER
PROJECT NUMBER: BRF 025-1(35)

FILE NAME: 78b134/Structures/zf134bdr
PROJECT LEADER: A. PORTALUPI
DESIGNED BY:
IPARM: zb134erd.i

PLOT DATE: 28-MAY-2003
DRAWN BY:
CHECKED BY:
SHEET 45 OF 79

## SOIL CLASSIFICATION

AASHTO

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

## ROCK QUALITY DESIGNATION

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

## SHEAR STRENGTH

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

## CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

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

## COMMONLY USED SYMBOLS

| | |
|---|---|
| | Water Elevation |
| ◡ | Standard Penetration Boring |
| ⊕ | Auger Boring |
| ⊙ | Rod Sounding |
| S | Sample |
| N | Standard Penetration Test Blow Count Per Foot For: 2" O.D. Sampler 1⅜" I.D. Sampler Hammer Weight Of 140 Lbs. Hammer Fall Of 30" |
| VS | Field Vane Shear Test |
| US | Undisturbed Soil Sample |
| B | Blast |
| DC | Diamond Core |
| MD | Mud Drill |
| WA | Wash Ahead |
| HSA | Hollow Stem Auger |
| AX | Core Size 1 1/8" |
| BX | Core Size 1 5/8" |
| NX | Core Size 2 1/8" |
| M | Double Tube Core Barrel Used |
| LL | Liquid Limit |
| PL | Plastic Limit |
| PI | Plasticity Index |
| NP | Non Plastic |
| w | Moisture Content (Dry Wgt. Basis) |
| D | Dry |
| M | Moist |
| MTW | Moist To Wet |
| W | Wet |
| Sat | Saturated |
| Bo | Boulder |
| Gr | Gravel |
| Sa | Sand |
| Si | Silt |
| Cl | Clay |
| HP | Hardpan |
| Le | Ledge |
| NLTD | No Ledge To Depth |
| CNPF | Can Not Penetrate Further |
| TLOB | To Ledge Or Boulder |
| NR | No Recovery |
| Rec. | Recovery |
| %Rec. | Percent Recovery |
| ROD | Rock Quality Designation |
| CBR | California Bearing Ratio |
| < | Less Than |
| > | Greater Than |
| R | Refusal (N > 100) |

COLOR

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

## DEFINITIONS (AASHTO)

**BEDROCK (LEDGE)** - Rock in its native location of indefinite thickness.

**BOULDER** - A rock fragment with an average dimension > 12 inches.

**COBBLE** - Rock fragments with an average dimension between 3 and 12 inches.

**GRAVEL** - Rounded particles of rock < 3" and > 0.0787" (#10 sieve).

**SAND** - Particles of rock < 0.0787" (#10 sieve) and > 0.0029" (#200 sieve).

**SILT** - Soil < 0.0029" (#200 sieve), non or slightly plastic and exhibits no strength when air-dried.

**CLAY** - Fine grained soil, exhibits plasticity when moist and considerable strength when air-dried.

**VARVED** - Alternate layers of silt and clay.

**HARDPAN** - Extremely dense soil, cemented layer, not softened when wet.

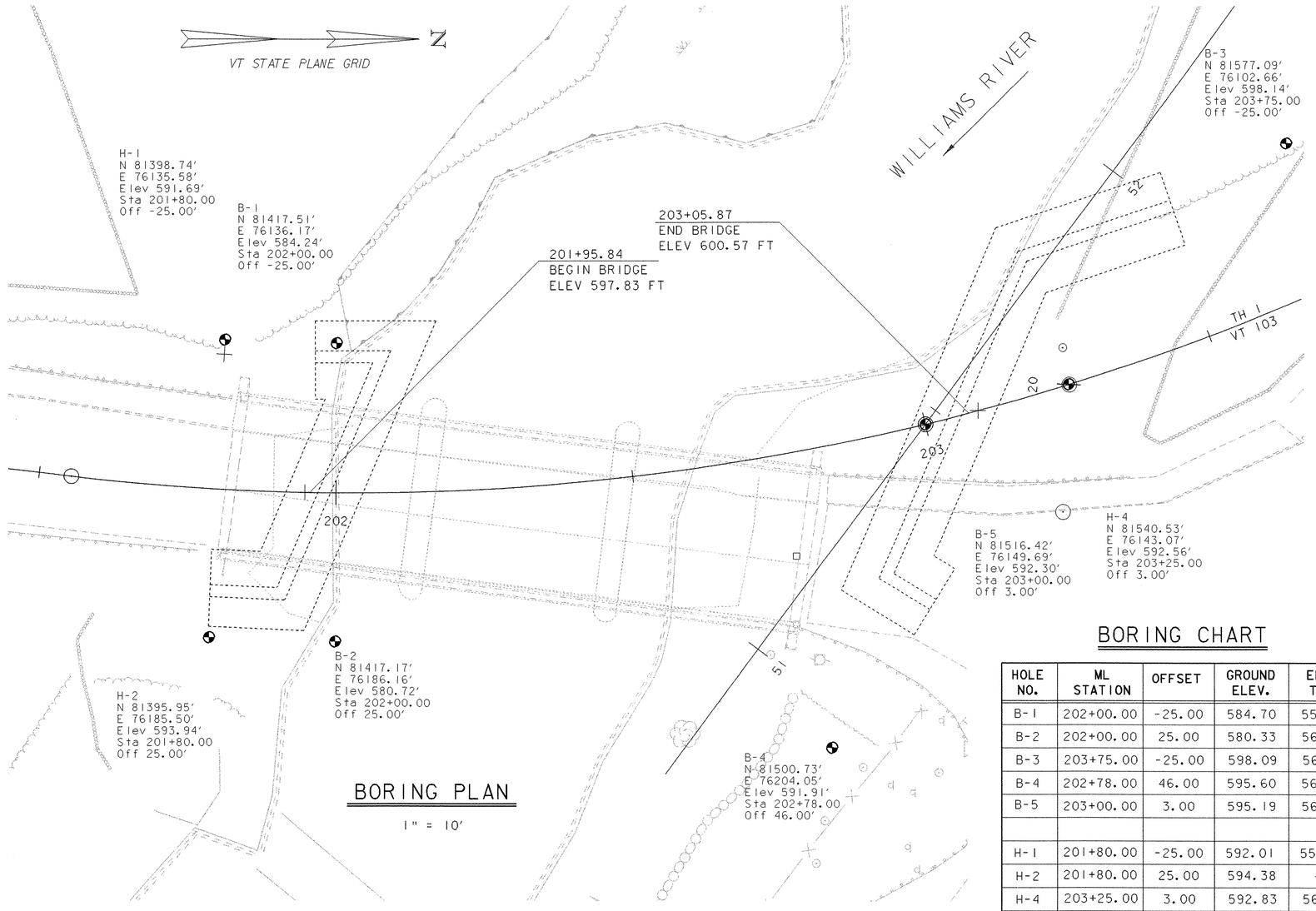
**MUCK** - Soft organic soil (containing > 10% organic material.

**MOISTURE CONTENT** - Weight of water divided by dry weight of soil.

**FLOWING SAND** - Granular soil so saturated (loose) that it flows into drill casing during extraction of wash rod.

**STRIKE** - Angle from magnetic north to line of intersection of bed with a horizontal plane.

**DIP** - Inclination of bed with a horizontal plane.




## BORING PLAN

1" = 10'

## BORING CHART

| HOLE NO. | ML STATION | OFFSET | GROUND ELEV. | ELEV. TLOB |
|---|---|---|---|---|
| B-1 | 202+00.00 | -25.00 | 584.70 | 554.70 |
| B-2 | 202+00.00 | 25.00 | 580.33 | 561.33 |
| B-3 | 203+75.00 | -25.00 | 598.09 | 568.09 |
| B-4 | 202+78.00 | 46.00 | 595.60 | 568.60 |
| B-5 | 203+00.00 | 3.00 | 595.19 | 561.19 |
| | | | | |
| H-1 | 201+80.00 | -25.00 | 592.01 | 558.01 |
| H-2 | 201+80.00 | 25.00 | 594.38 | —— |
| H-4 | 203+25.00 | 3.00 | 592.83 | 563.83 |
| | | | | |

## GENERAL NOTES

1. The subsurface explorations shown herein were made between and by the Agency.
2. Soil and rock classifications, properties and descriptions are based on engineering interpretation from available subsurface information by the Agency and may not necessarily reflect actual variations in subsurface conditions that may be encountered between individual boring or sample locations.
3. Observed water levels and/or conditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall, methods of exploration and other factors.
4. Engineering judgement was exercised in preparing the subsurface information presented herein. Analysis and interpretation of subsurface data was performed and interpreted for Agency design and estimating purposes. Presentation of the information in the Contract is intended to provide the Contractor access to the same data available to the Agency. The subsurface information is presented in good faith and is not intended as a substitute for personal investigation, independent interpretation, independent analysis or judgement by the Contractor.
5. Pictorial structure details shown on the boring plan layout or soils profile are for illustrative purposes only and may not accurately portray final contract details.
6. Terminology used on boring logs to describe the hardness, degree of weathering, and spacing of fractures, joints and other discontinuities in the bedrock is defined in the AASHTO Manual on Subsurface Investigations, 1988.

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. |
| | Surv. Sta. 202+50 |

VT 103 OVER THE WILLIAMS RIVER

BORING INFORMATION SHEET

| | |
|---|---|
| Designed By THL | Drawn By THL |
| Checked By Date | Bridge Design Supervisor NAP Date 98 |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\87bl34\Structures\zbl34cbp.dgn | sbl34cbp.l |
| Bridge Sheet No. BRI02 | Sheet 46 of 79 |

PLOTTED 28-MAY-2003

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**
**MATERIALS & RESEARCH DIVISION**
**SUBSURFACE INFORMATION**

HOLE NO.: B-1
SHEET 1 OF 1
DATE STARTED: 5/11/99
DATE COMPLETED: 5/12/99

PROJECT NAME: CHESTER
SITE NAME: BR 12
STATION: 202+00.00
GROUND EL.: 584.70

PROJECT NUMBER: BRF 025-1(35)
SITE NO.: VT 103
OFFSET: -25.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: MCGLYNN
DRILLER: CHABOT
LOGGER: YOUNG

BORING RIG: SKID RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

B.F. ABUT. #1

EST. PILE LENGTH = 26'-0"

| DEPTH | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. % | GRAVEL % | SAND % | FINES % | LL | PI |
|---|---|---|---|---|---|---|---|---|---|
| 5 | | No Sample, Boulders | | | | | | | |
| 10 | | A-1-b, GrSa, gry, Moist, Rec. = 1.1' | 39 | 13.4 | 42.3 | 44 | 13.7 | | |
| 15 | | A-1-b, SaGr, brn, Moist, Rec. = 0.5' | 16 | 14.4 | 43.8 | 42.8 | 13.4 | | |
| 20 | | A-1-b, GrSa, brn, Moist, Rec. = 0.85' | 27 | 13.2 | 43.3 | 46.4 | 10.3 | | |
| 25 | | A-2-4, SiSa, brn, Moist, Rec. = 1.4' | 43 | 15.3 | 17.4 | 61.6 | 21 | | |
| | | Top of bedrock @ 30.' | | | | | | | |
| 30 | | Run #1: BMXDC, 30.0'-33.0', Rec. = 2.5', See Geologist's Report. (Several seams. Barrel plugged.) | 1 | 83 | 64 | 20 | | | |
| 35 | | Run #2: BMXDC, 33.0'-38.0', Rec. = 4.2', See Geologist's Report. | 2 | 84 | 72 | 20 | | | |
| 40 | | Run #3: BMXDC, 38.0'-43.0', Rec. = 4.3', See Geologist's Report. | 3 | 86 | 25 | 20 | | | |
| 45 | | Run #4: BMXDC, 43.0'-44.5', Rec. = 1.3' See Geologist's Report. | 4 | 87 | 0 | 20 | | | |
| | | Hole stopped @ 44.5' | | | | | | | |

E.P.T.

Geologist's Report:

Run #1: Light gray granitic gneiss, Hard to very hard, Unweathered, Competent.

Run #2: Same as Run #1.

Run #3: Same material as Run #1, but moderately to severely weathered from 38.3' to bottom of run. Poor Competency.

Run #4: Same as Run #3.

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**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**
**MATERIALS & RESEARCH DIVISION**
**SUBSURFACE INFORMATION**

HOLE NO.: B-2
SHEET 1 OF 1
DATE STARTED: 5/18/99
DATE COMPLETED: 5/18/999

PROJECT NAME: CHESTER
SITE NAME: BR 12
STATION: 202+00
GROUND EL.: 580.33

PROJECT NUMBER: BRF 025-1(35)
SITE NO.: VT 103
OFFSET: 25.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: MCGLYNN
DRILLER: CHABOT
LOGGER: YOUNG

BORING RIG: SKID RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

B.F. ABUT. #1

EST. PILE LENGTH = 20'-0"

| DEPTH | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. % | GRAVEL % | SAND % | FINES % | LL | PI |
|---|---|---|---|---|---|---|---|---|---|
| 5 | | A-1-a, SaGr, Lt/brn, Moist, Rec. = 0.5' | 21 | 7.9 | 72.5 | 22.1 | 5.4 | | |
| 10 | | A-1-b, GrSa, Lt/brn, Moist, Rec. = 1.1' | 47 | 13.4 | 38.8 | 46.4 | 14.8 | | |
| 15 | | A-1-b, SaGr, brn, Moist, Rec. = 0.2' | R | 10.6 | 47.3 | 40.2 | 12.5 | | |
| | | Top of bedrock @ 19.0' | | | | | | | |
| 20 | | Run #1: BXMDC, 19.0'-22.3', Rec. = 3.0', See Geologist's Report. | RUN 1 | REC% 91 | RQD% 91 | Dip° 20 | | | |
| | | Run #2: BXMDC, 22.3'-25.3' Rec. = 2.3', (Plugged core barrel), See Geologist's Report. | 2 | 77 | 77 | 20 | | | |
| 25 | | Run #3: BXMDC, 25.3'-29.3', Rec. = 3.4', See Geologist's Report. | 3 | 85 | 85 | 20 | | | |
| 30 | | Hole stopped @ 29.3' | | | | | | | |
| 35 | | | | | | | | | |
| 40 | | | | | | | | | |
| 45 | | | | | | | | | |

E.P.T.

Geologist's Report:

Run #1: Gray gneiss, Hard, Unweathered, Competent.

Run #2: Same as Run #1.

Run #3: Same as Run #1, with rusty weathered joint at end of run.

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**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**
**MATERIALS & RESEARCH DIVISION**
**SUBSURFACE INFORMATION**

HOLE NO.: B-3
SHEET 1 OF 1
DATE STARTED: 5/25/99
DATE COMPLETED: 5/25/99

PROJECT NAME: CHESTER
SITE NAME: BR 12
STATION: 203+75.00
GROUND EL.: 598.09

PROJECT NUMBER: BRF 025-1(35)
SITE NO.: VT 103
OFFSET: -25.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: MCGLYNN
DRILLER: CHABOT
LOGGER: YOUNG

BORING RIG: SKID RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

B.F. ABUT. #2

EST. PILE LENGTH = 13'-0"

| DEPTH | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. % | GRAVEL % | SAND % | FINES % | LL | PI |
|---|---|---|---|---|---|---|---|---|---|
| 5 | | No Sample, Rock Fill, No Rec. | | | | | | | |
| 10 | | No Sample, Boulders, No Rec. | 43 | | | | | | |
| 15 | | A-1-a, SaGr, brn, Moist, Rec. = 1.0' | 65 | 10.4 | 50.2 | 40.9 | 8.9 | | |
| 20 | | No Rec., Boulders | | | | | | | |
| 25 | | BXDC, Cored Boulder | | | | | | | |
| | | Top of bedrock @ 30.0' | | | | | | | |
| 30 | | Run #1: BXMDC, 30.0'-35.0', Rec. = 2.9', See Geologist's Report. | RUN 1 | REC% 58 | RQD% 50 | Dip° 10 | | | |
| 35 | | Run #2: BXMDC, 35.0'-40.0', Rec. = 2.2', See Geologist's Report. | 2 | 44 | 25 | 15 | | | |
| 40 | | Run #3: BXMDC, 40.0'-45.0', Rec. = 4.8', See Geologist's Report. | 3 | 96 | 90 | 15 | | | |
| 45 | | Hole stopped @ 45.0' | | | | | | | |

E.P.T.

Geologist's Report:

Run #1: 30.0'-32.5', Gray quartz biotite schist, Moderately hard, Unweathered, Competent.
32.5'-35.0', Black biotite quartz schist, Moderately hard, Unweathered, Competent.

Run #2: 35.0'-36.4', Same as bottom of Run #1, Numerous joints, Poor competency.
36.4'-37.0', Granitic dike
37.0'-40.0', Same as beginning of Run#1.

Run #3: Same as beginning of Run #1, Competent.

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**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**
**MATERIALS & RESEARCH DIVISION**
**SUBSURFACE INFORMATION**

HOLE NO.: B-4
SHEET 1 OF 1
DATE STARTED: 5/20/99
DATE COMPLETED: 5/20/99

PROJECT NAME: CHESTER
SITE NAME: BR 12
STATION: 202+78.00
GROUND EL.: 595.60

PROJECT NUMBER: BRF 025-1(35)
SITE NO.: VT 103
OFFSET: 46.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: MCGLYNN
DRILLER: CHABOT
LOGGER: YOUNG

BORING RIG: SKID RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

B.F. ABUT. #2

EST. PILE LENGTH = 12'-0"

| DEPTH | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. % | GRAVEL % | SAND % | FINES % | LL | PI |
|---|---|---|---|---|---|---|---|---|---|
| 5 | | No Sample, Boulders | | | | | | | |
| 10 | | A-2-4, SiSa, brn, MTW, Rec. = 0.5' | 9 | 40.9 | 8.8 | 56.7 | 34.5 | | |
| 15 | | No Sample, Boulders | | | | | | | |
| 20 | | A-1-b, GrSa, brn, Moist, Rec. = 1.2' | 22 | 13 | 40.5 | 48.9 | 10.6 | | |
| 25 | | A-1-b, GrSa, Lt/brn, Moist, Rec. = 1.6' | 67 | 11.3 | 44.8 | 45.7 | 9.5 | | |
| | | Top of bedrock @ 27.0' | | | | | | | |
| | | Run #1: BXMDC, 27.0'-30.0', Rec. = 1.75' (Barrel plugged) See Geologist's Report. | RUN 1 | REC% 58 | RQD% 58 | Dip° 20 | | | |
| 30 | | Run #2: BXMDC, 30.0'-35.0', Rec. = 4.8', See Geologist's Report. | 2 | 96 | 96 | 20 | | | |
| 35 | | Run #3: BXMDC, 35.0'-35.5' Barrel plugged) Rec. = 0.5', See Geologist's Report. | 3 | 100 | 100 | 20 | | | |
| | | Run #4: BXMDC, 35.5'-36.0 (Barrel plugged) No recovery. See Geologist's Report. | 4 | 0 | — | — | | | |
| 40 | | Hole stopped @ 36.0' | | | | | | | |
| 45 | | | | | | | | | |

E.P.T.

Geologist's Report:

Run #1: Gray gneiss and granitic gneiss, Hard, Unweathered, Competent.

Run #2: Same as Run #1, with granitic dike at the bottom of run, Competent.

Run #3: Same as Run #2. See Note below.

Run #4: No Recovery. See Note below.

*Note: Two additional runs made with barrel plugging each time. Hole stopped at 36.0'.

---

## LEGEND

B.F. = BOTTOM OF FOOTING ELEVATION
E.P.T. = ESTIMATED PILE TIP ELEVATION

## NOTE

1. BOTTOM OF FOOTING ELEVATION = 580.00.

SURVEYED BY _____ DATE _____
DRAWN BY J. TOUCHETTE DATE 06/99
SQUAD LEADER C.C. BENDA
DESIGN FILE NO. /str2/87bl34/zbl34cbo.dgn
IPARM FILE _____ DATE PLOTTED 28-MAY-2003
PROJ. NAME CHESTER
PROJ. NO. BRF 025-1(35)
BRIDGE SHEET NO. BRI03
SHEET 47 OF 79 SHEETS

## STATE OF VERMONT
## AGENCY OF TRANSPORTATION
## MATERIALS & RESEARCH DIVISION
## SUBSURFACE INFORMATION

HOLE NO.: B-5
SHEET 1 OF 1
DATE STARTED: 5/18/99
DATE COMPLETED: 5/20/99

PROJECT NAME: CHESTER
SITE NAME: BR 12
STATION: 203+00.00
GROUND EL.: 595.19

PROJECT NUMBER: BRF 025-1(35)
SITE NO.: VT 103
OFFSET: 3.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: TALLMAN
DRILLER: RUSSELL
LOGGER: RUSSELL

BORING RIG: SKID RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

B.F. ABUT. #2

EST. PILE LENGTH = 20'-0"

E.P.T.

| DEPTH | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. % | GRAVEL % | SAND % | FINES % | LL | PI |
|---|---|---|---|---|---|---|---|---|---|
| 5 | | A-1-b, GrSa, brn, Moist, Rec. = 0.67' | 7 | 16 | 44.2 | 46 | 9.8 | | |
| | | 7.5'-9.0', Boulder | | | | | | | |
| 10 | | BXDC, 9.0'-10.8', Boulder No Sample. | | | | | | | |
| | | BXDC 12.0'-13.8', Boulder | | | | | | | |
| 15 | | (visual class.), A-4, Si and Little Organics, brn, Sat., Rec. = 0.75', (tested 12.0% organic) | 4 | 108.3 | | | | | |
| | | BXDC, 18.0'-19.0', Boulder | | | | | | | |
| 20 | | A-1-b, SaGr, brn, Moist, Rec. = 0.67' | 12 | 12.4 | 52.2 | 38.6 | 9.2 | | |
| 25 | | A-1-b, GrSa, brn, Moist, Rec. = 0.83' | 23 | 15.9 | 37.6 | 55.3 | 7.1 | | |
| 30 | | A-1-b, GrSa, gry, Moist, Rec. = 0.67' | R | 11.1 | 38.2 | 46.7 | 15.1 | | |
| | | Top of bedrock @ 34.0' | | | | | | | |
| 35 | | Run #1: BXMDC, 34.0'-39.0', Rec. = 3.7', See Geologist's Report. | RUN 1 | REC% 74 | RQD% 55 | Dip° 20 | | | |
| 40 | | Run #2: BXMDC, 39.0'-44.0', Rec. = 1.7', See Geologist's Report. | 2 | 34 | 20 | 20 | | | |
| 45 | | Run #3: BXMDC, 44.0'-47.0', Rec. = 2.9', See Geologist's Report. | 3 | 97 | 97 | 25 | | | |
| | | Hole stopped @ 47.0' | | | | | | | |

Geologist's Report:

Run #1: Light gray gneiss, Hard, Unweathered, Competent.

Run #2: Same as Run #1, Poor Competency.

Run #3: 44.0'-45.1', Gray gneiss, Hard, Unweathered, Competent.
45.1'-46.1', White granitic dike.
46.1'-47.0', Same as beginning of run.

## STATE OF VERMONT
## AGENCY OF TRANSPORTATION
## MATERIALS & RESEARCH DIVISION
## SUBSURFACE INFORMATION

HOLE NO.: H-1
SHEET 1 OF 1
DATE STARTED: 5/13/99
DATE COMPLETED: 5/13/99

PROJECT NAME: CHESTER
SITE NAME: BR 12
STATION: 201+80.00
GROUND EL.: 592.01

PROJECT NUMBER: BRF 025-1(35)
SITE NO.: VT 103
OFFSET: -25.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: MCGLYNN
DRILLER: CHABOT
LOGGER: YOUNG

BORING RIG: SKID RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

B.F. ABUT. #1

EST. PILE LENGTH = 23'-0"

E.P.T.

| DEPTH | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. % | GRAVEL % | SAND % | FINES % | LL | PI |
|---|---|---|---|---|---|---|---|---|---|
| 5 | | No Rec. | 16 | | | | | | |
| 10 | | A-2-4, GrSa, brn, Moist, Rec. = 1.5' | 30 | 14.4 | 25.9 | 56.7 | 17.4 | | |
| 15 | | A-1-a, Gr, gry, Moist, Rec. = 0.6' | R | 7 | 81.2 | 16.2 | 2.6 | | |
| 20 | | No Rec., Sampler plugged by stone. | 15 | | | | | | |
| 25 | | A-1-b, GrSa, brn, Moist, Rec. = 1.25' | 35 | 12.7 | 37.2 | 51.4 | 11.4 | | |
| 30 | | A-2-4, GrSa, brn, Moist, Rec. = 1.2' | 30 | 11.7 | 30.4 | 53.8 | 15.8 | | |
| | | Top of bedrock @ 34.0' | | | | | | | |
| 35 | | Run #1: BXMDC, 34.0'-37.75', Rec. = 2.9', See Geologist's Report. | RUN 1 | REC% 77 | RQD% 40 | Dip° 20 | | | |
| | | Run #2: BXMDC, 37.75'-39.75', Rec. = 0.5' See Geologist's Report. | 2 | 25 | 0 | 20 | | | |
| 40 | | Hole stopped @ 39.75' | | | | | | | |
| 45 | | | | | | | | | |

Geologist's Report:

Run #1: 34.0'-35.9' = Light gray granitic gneiss, Hard, Unweathered, Competent.
35.9'-37.75' = Light gray granitic gneiss, Soft, Moderately to severely weathered, Poor competency.

Run #2: Same as bottom of Run #1, Poor competency.

## STATE OF VERMONT
## AGENCY OF TRANSPORTATION
## MATERIALS & RESEARCH DIVISION
## SUBSURFACE INFORMATION

HOLE NO.: H-2
SHEET 1 OF 1
DATE STARTED: 5/14/99
DATE COMPLETED: 5/17/99

PROJECT NAME: CHESTER
SITE NAME: BR 12
STATION: 201+80.00
GROUND EL.: 594.38

PROJECT NUMBER: BRF 025-1(35)
SITE NO.: VT 103
OFFSET: 25.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: MCGLYNN
DRILLER: CHABOT
LOGGER: YOUNG

BORING RIG: SKID RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

B.F. ABUT. #1

EST. PILE LENGTH = 19'-0"

E.P.T.

| DEPTH | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. % | GRAVEL % | SAND % | FINES % | LL | PI |
|---|---|---|---|---|---|---|---|---|---|
| 5 | | A-2-4, GrSa, brn, Moist, Rec. = 0.75' On possible boulder | R | 17.1 | 25.8 | 55.5 | 18.7 | | |
| 10 | | A-1-b, GrSa, gry, Moist, Rec. = 1.2' | 15 | 16.1 | 37.6 | 53.9 | 8.5 | | |
| 15 | | A-1-b, GrSa, gry, Moist, Rec. = 1.1' | 28 | 13.1 | 35.3 | 52.4 | 12.3 | | |
| 20 | | A-1-b, SaGr, gry, Moist, Rec. = 1.1' | 26 | 12.6 | 54 | 34.3 | 11.7 | | |
| 25 | | No Rec., (Appeared to be gravel while drilling.), (stone in end of sampler) | 24 | | | | | | |
| 30 | | A-3, Sa, gry, MTW, Rec. = 0.8' | R | 25.3 | 4.4 | 93 | 2.6 | | |
| | | Hole stopped @ 31.0' | | | | | | | |
| 35 | | | | | | | | | |
| 40 | | | | | | | | | |
| 45 | | | | | | | | | |

Note:
Hole discontinued at 31.0' due to broken casing.

## STATE OF VERMONT
## AGENCY OF TRANSPORTATION
## MATERIALS & RESEARCH DIVISION
## SUBSURFACE INFORMATION

HOLE NO.: H-4
SHEET 1 OF 1
DATE STARTED: 5/24/99
DATE COMPLETED: 5/25/99

PROJECT NAME: CHESTER
SITE NAME: BR 12
STATION: 203+25.00
GROUND EL.: 592.83

PROJECT NUMBER: BRF 025-1(35)
SITE NO.: VT 103
OFFSET: 3.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: TALLMAN
DRILLER: RUSSELL
LOGGER: RUSSELL

BORING RIG: SKID RIG
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

B.F. ABUT. #2

EST. PILE LENGTH = 17'-0"

E.P.T.

| DEPTH | SYMBOL | CLASSIFICATION OF MATERIALS (Description) | BLOWS PER FOOT | M.C. % | GRAVEL % | SAND % | FINES % | LL | PI |
|---|---|---|---|---|---|---|---|---|---|
| | | 0.0'-3.0', Cobbles | | | | | | | |
| | | 3.0'-4.1', Boulders | | | | | | | |
| 5 | | A-1-b, GrSa, brn, Moist, Rec. = 0.4' | 6 | 14.6 | 40.7 | 47 | 12.3 | | |
| 10 | | BXDC, (visual class.) Broken Rock, gry, Dry, Rec. = 0.2' | R | | | | | | |
| | | BXDC 10.6'-11.5', Boulder 11.5'-13.9', Cobbles | | | | | | | |
| 15 | | A-1-b, GrSa, gry, Moist, Rec. = 0.3' | 17 | 15.6 | 33.5 | 59.1 | 7.4 | | |
| 20 | | A-1-b, GrSa, gry, Moist, Rec. = 1.5' | 87 | 10.9 | 42.9 | 44.1 | 13 | | |
| 25 | | No Sample, Boulders | | | | | | | |
| | | Top of bedrock @ 29.0' | | | | | | | |
| 30 | | Run #1: BXMDC, 29.0'-34.0', Rec. = 3.0', See Geologist's Report. | RUN 1 | REC% 60 | RQD% 50 | Dip° 35 | | | |
| 35 | | Run #2: BXMDC, 34.0'-39.0', Rec. = 5.0', See Geologist's Report. | 2 | 100 | 100 | 35 | | | |
| 40 | | Hole stopped @ 39.0' | | | | | | | |
| 45 | | | | | | | | | |

Geologist's Report:

Run #1: Gray gneiss, Hard, Unweathered, Competent.

Run #2: Same as Run #1, but color turns to white and black due to greater biotite content, Competent.

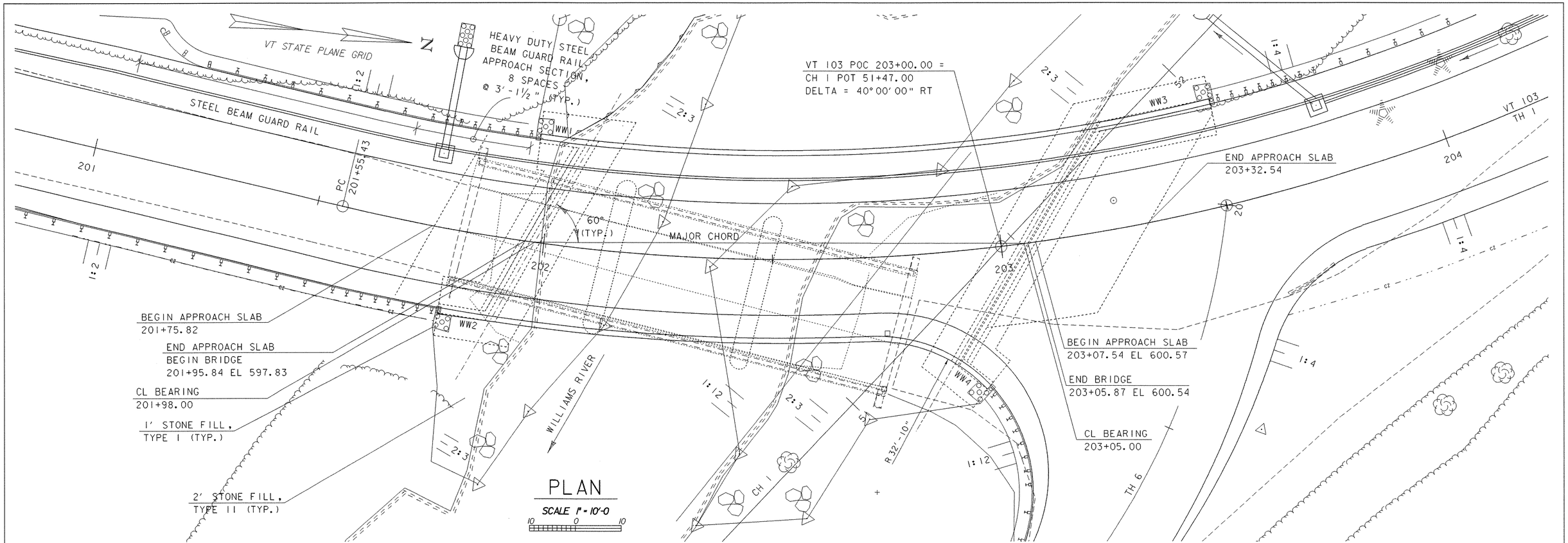
## LEGEND

B.F. = BOTTOM OF FOOTING ELEVATION
E.P.T. = ESTIMATED PILE TIP ELEVATION

## NOTE

1. BOTTOM OF FOOTING ELEVATION = 580.00.

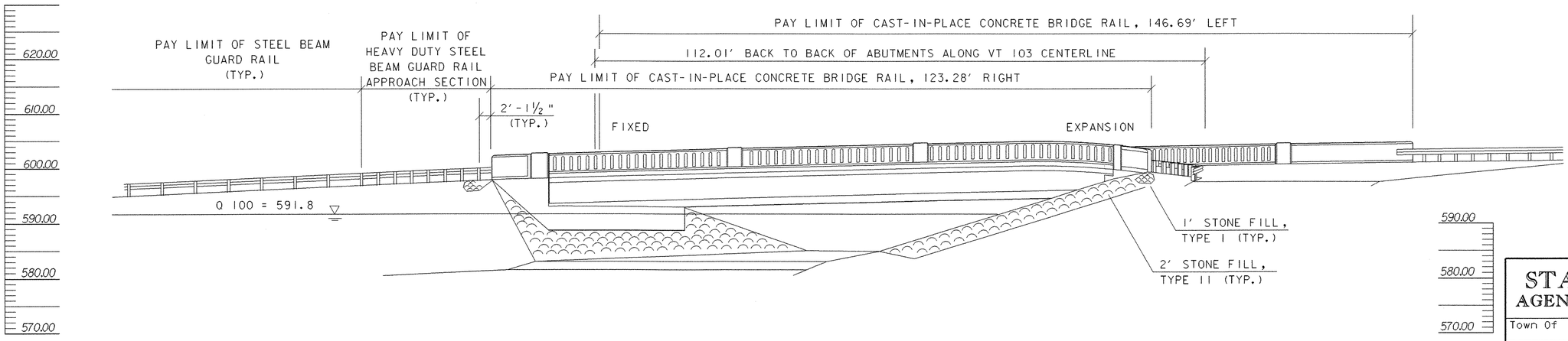
SURVEYED BY _____ DATE _____
DRAWN BY J. TOUCHETTE DATE 06/99
SQUAD LEADER C.C. BENDA
DESIGN FILE NO. /str2/87bl34/zbl34cbo.dgn
IPARM FILE _____ DATE PLOTTED 28-MAY-2003
PROJ. NAME CHESTER
PROJ. NO. BRF 025-1(35)
BRIDGE SHEET NO. BRI04
SHEET 48 OF 79 SHEETS




## PLAN

SCALE 1" = 10'-0

10 0 10




## BRIDGE ELEVATION AT DOWNSTREAM FASCIA

SCALE 1" = 10'-0

10 0 10

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |

VT 103 OVER THE WILLIAMS RIVER

PLAN AND ELEVATION

| | |
|---|---|
| Designed By THL / LKW | Drawn By THL / PBD |
| Checked By T. GRANT | Date 10/00 |
| | Bridge Design Supervisor NAP |
| | Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |

I.G.C.\\pdfs_cadd\fllngcabinet$\87bi34\Structures\zbi34cpe.dgn zbi34cpe.j

Bridge Sheet No. BRI05 Sheet 49 of 79

# GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, DATED 2001, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, AND ITS LATEST REVISIONS.

2. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT SILTATION OR POLLUTION, ESPECIALLY THE DISCHARGE OF RAW CONCRETE, INTO THE WILLIAMS RIVER, AS DIRECTED BY THE ENGINEER AND STANDARD SPECIFICATION, SECTION 105.

3. DESIGN IS FOR HS25 LOADING, USING LOAD FACTOR METHOD.

4. ALL STRUCTURAL STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH SECTION 506.03 OF THE STANDARD SPECIFICATIONS.

5. AFTER SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF THE GIRDERS SHALL BE TAKEN AS DIRECTED BY THE ENGINEER FOR USE IN DETERMINING FINAL GRADE.

6. ANY BOLT HOLES IN THE WEB OF THE FASCIA GIRDERS NOT OTHERWISE FILLED SHALL BE FILLED WITH BUTTON HEAD OR HEX HEAD BOLTS COMPATIBLE WITH THE GIRDER STEEL. THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19.

7. FASCIA OVERHANG BRACKETS SHALL BE SPACED AT A MAXIMUM OF 4 FEET AND SHALL BE DESIGNED BY THE CONTRACTOR.

8. ALL FIELD CONNECTIONS SHALL BE MADE USING $\frac{7}{8}$ INCH DIAMETER BOLTS MEETING ASTM DESIGNATION A 325 (AASHTO M 164). HOLES SHALL BE $\frac{15}{16}$ INCH DIAMETER. ANY CONNECTIONS NOT DESIGNATED SHALL BE DETAILED BY THE FABRICATOR.

9. ALL WELDING AND DIMENSIONAL TOLERANCES OF WELDED MEMBERS SHALL CONFORM TO THE LATEST ANSI/ AASHTO/AWS D1.5 - 95 CODE AND LATEST REVISIONS.

10. THE UNIT WEIGHT OF SOIL SHALL BE TAKEN AS 140 PCF.

11. ALL REINFORCING STEEL IN THE CONCRETE DECK, SIDEWALK, APPROACH SLABS AND RAIL SHALL BE EPOXY COATED AND PAID FOR UNDER ITEM 507.17. WHEN EPOXY COATED REBAR IS CUT, THE UNCOATED ENDS SHALL BE REPAIRED WITH MATERIALS AND PROCEDURES APPROVED BY THE COATING MANUFACTURER. FLAME CUTTING OF EPOXY COATED REBAR WILL NOT BE PERMITTED.

12. REINFORCING PLACEMENT TOLERANCES SHALL BE:
    SPACING: +/- 1 INCH
    CLEARANCE: +/- $\frac{1}{4}$ INCH

13. MINIMUM COVER FOR REINFORCING STEEL IN SUBSTRUCTURES SHALL BE 2" ALONG BACK FACES OF WALLS AGAINST EARTH AND 3" ELSEWHERE, UNLESS OTHERWISE DESIGNATED ON PLANS.

14. DECK AND SIDEWALK, SHALL BE CONCRETE, HIGH PERFORMANCE CLASS A. BRIDGE RAILING SHALL BE CONCRETE, HIGH PERFORMANCE CLASS AA. ALL OTHER CONCRETE SHALL BE CONCRETE, HIGH PERFORMANCE CLASS B UNLESS OTHERWISE DESIGNATED ON THE PLANS.

15. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" x 1".

16. THE FOLLOWING THICKNESS TOLERANCES SHALL BE ADHERED TO:

| MATERIAL | THICKNESS TOLERANCE |
|---|---|
| | +/- $\frac{1}{4}$" |
| BIT. CONC. PAVEMENT (ON BRIDGE) | +/- $\frac{1}{4}$" LIFT |
| BIT. CONC. PAVEMENT (OFF BRIDGE) | +/- 1" |
| GRANULAR BORROW | +/- 1" |
| SUBBASE | |

17. WATER REPELLENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF THE DECK BETWEEN DRIP BEADS.

18. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68° F.

19. TRAFFIC WILL BE DETOURED, DURING CONSTRUCTION OF THE BRIDGE.

20. TRAFFIC SHALL BE ALLOWED ON THE NEW BRIDGE ONLY AFTER THE SPECIFIED CURE PERIOD HAS EXPIRED AND THE 28 DAY DESIGN STRENGTH HAS BEEN REACHED, AS EVIDENCED BY TEST CYLINDERS CURED UNDER FIELD CONDITIONS.

21. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

22. THE KEY IN CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT.

23. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL. OTHER BRIDGE SEAT AREAS SHALL BE SLOPED $\frac{1}{2}$ INCH PER FOOT. ABUTMENT SEATS SHALL BE SLOPED FULL WIDTH TOWARD CENTER SPAN. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE SMOOTH STEEL TROWEL FINISH.

24. ALL STRUCTURAL STEEL, INCLUDING GIRDERS, CROSS FRAMES, STIFFENERS, AND LATERAL BRACING WITHIN A DISTANCE OF 7 FEET FROM THE END OF THE GIRDERS (EXPANSION END), SHALL BE COATED WITH A PROTECTIVE PAINT SYSTEM AS SPECIFIED IN SUPPLEMENTAL SPECIFICATION 513. THE COLOR OF PAINT WILL BE BROWN, COLOR CHIP 20059. GREASING SHALL BE DONE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 513.06(d).

25. ITEM 529.15, "REMOVAL OF STRUCTURE", SHALL INCLUDE THE REMOVAL OF THE SUPERSTRUCTURE, REMOVAL OF THE PIERS, AND REMOVAL OF THE ABUTMENTS. REMOVE THE PIERS TO THE ELEVATIONS SHOWN ON THE PROFILE, AND REMOVE ABUTMENTS IN THEIR ENTIRETY (TO INCLUDE FOOTINGS).

26. DECK POURS ARE TO BE CONSTRUCTED IN ONE CONTINUOUS OPERATION WITH A MAXIMUM DURATION OF 8 HOURS. IF CIRCUMSTANCES BEYOND THE CONTRACTOR'S CONTROL PREVENT THIS FROM BEING ACCOMPLISHED, A 96 HOUR DELAY BETWEEN THE COMPLETION OF ONE DAY'S POUR AND THE BEGINNING OF ANOTHER DECK POUR SHALL BE OBSERVED, AND TRANSVERSE BRIDGE SLAB CONSTRUCTION JOINTS AS SHOWN ON SHEET 57 SHALL BE USED BETWEEN ADJACENT DECK POURS.

27. ALL OF THE EXISTING SUBSTRUCTURE INFORMATION SHOWN WITHIN THESE PLANS HAS BEEN OBTAINED THROUGH FIELD SURVEY AND FIELD MEASUREMENTS AND ARE ASSUMED TO BE CORRECT. HOWEVER, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS CRITICAL TO THE CONSTRUCTION OF THE NEW STRUCTURE AND NOTIFY THE RESIDENT ENGINEER OF ANY DISCREPANCIES WITH THE INFORMATION SHOWN IN THESE PLANS.

28. STEEL HP14 x 73 PILES SHALL BE DRIVEN TO A REQUIRED ULTIMATE CAPACITY EQUAL TO 425 KIPS. PILE TIP REINFORCEMENT SHALL CONFORM TO SUBSECTION 505.04(D).

29. POLYURETHANE JOINT SEALER, PER SUBSECTION 524.06(C), COLOR TO MATCH CONCRETE. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR CONCRETE.

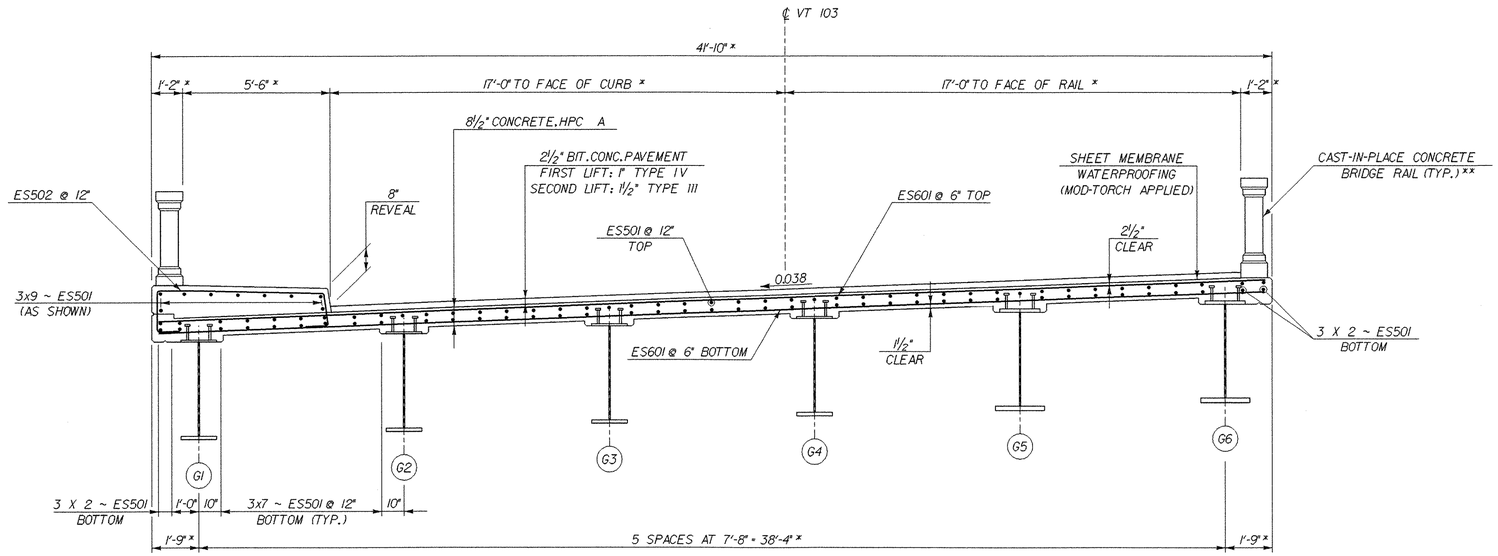
30. TEMPORARY APPROACHES AND TEMPORARY BRIDGE SHALL HAVE MINIMUM OF 3 INCHES BITUMINOUS CONCRETE. MIX DESIGN SUBMITTAL AND COMPACTION MEASUREMENT REQUIREMENTS OF SECTION 406 OF THE PROJECT SPECIAL PROVISIONS ARE WAIVED FOR PAVEMENT PLACED ON THE TEMPORARY APPROACHES. WORK REQUIRED TO LATER REMOVE AND DISPOSE THE PAVEMENT ON TEMPORARY APPROACHES WILL NOT BE PAID FOR SEPARATELY AND IS CONSIDERED INCIDENTAL TO THE WORK PAID FOR UNDER ITEM 528.11 TWO-WAY TEMPORARY BRIDGE.

McFARLAND - JOHNSON, INC.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |
| VT 103 OVER THE WILLIAMS RIVER | |
| GENERAL NOTES | |
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By T. GRANT Date 10/00 | Bridge Design Supervisor M. ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\87bl34\Structures\zbl34ogn.dgn | zbl34ognJ |
| Bridge Sheet No. BR106 | Sheet 50 of 79 |

PLOTTED 03-JUN-2003

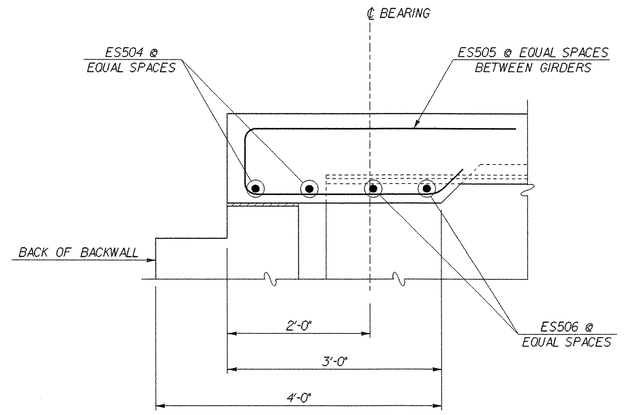



## BRIDGE TYPICAL SECTION

SCALE: 3/8" = 1'-0"

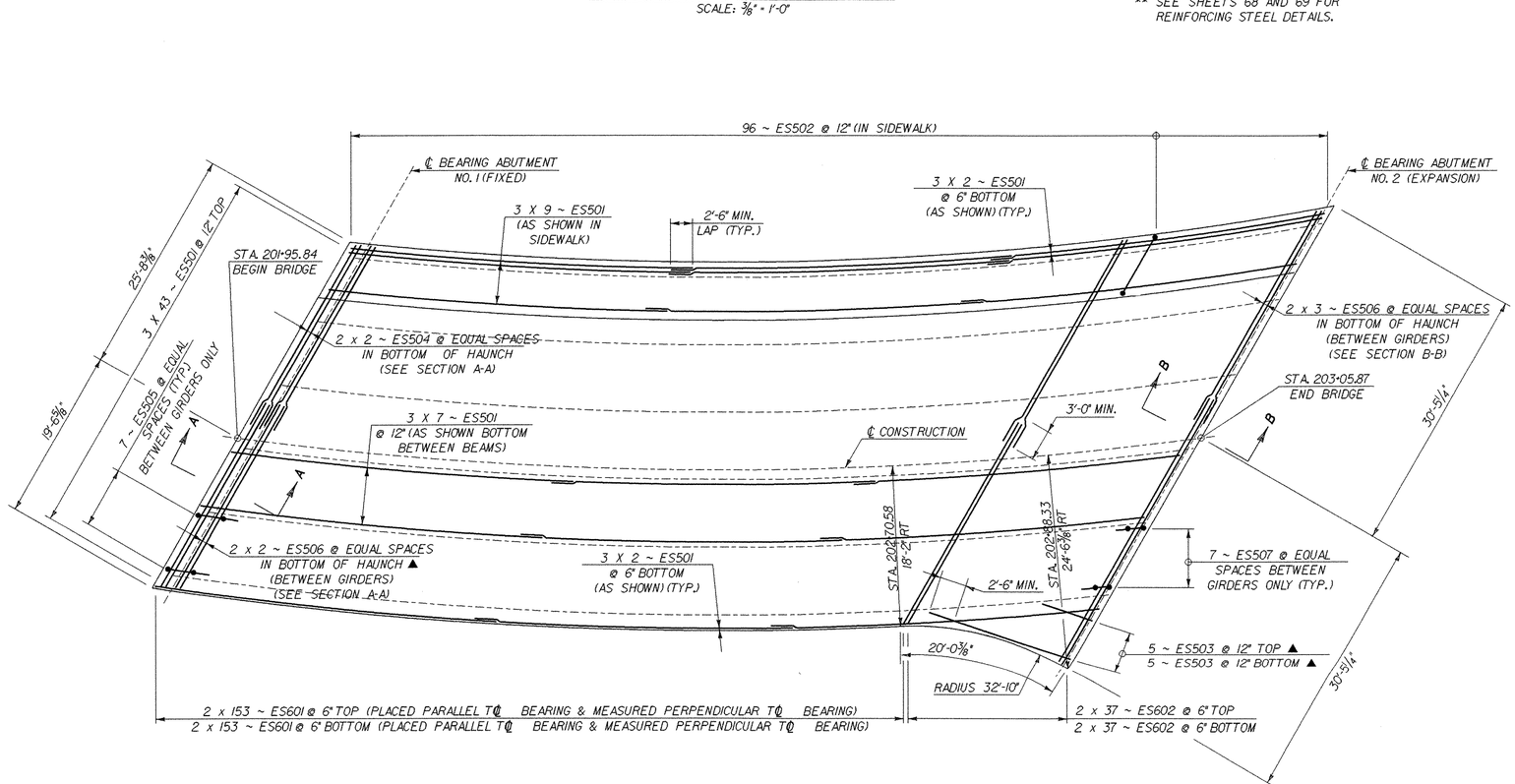
* DIMENSIONS ARE RADIAL

** SEE SHEETS 68 AND 69 FOR REINFORCING STEEL DETAILS.



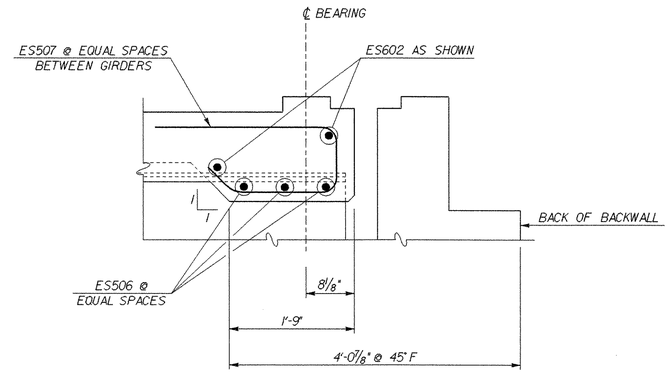

## SECTION A-A

SCALE: 1" = 1'-0"




## DECK REINFORCING PLAN

SCALE: 1/8" = 1'-0"




## SECTION B-B

SCALE: 1" = 1'-0"

McFARLAND - JOHNSON, INC.

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

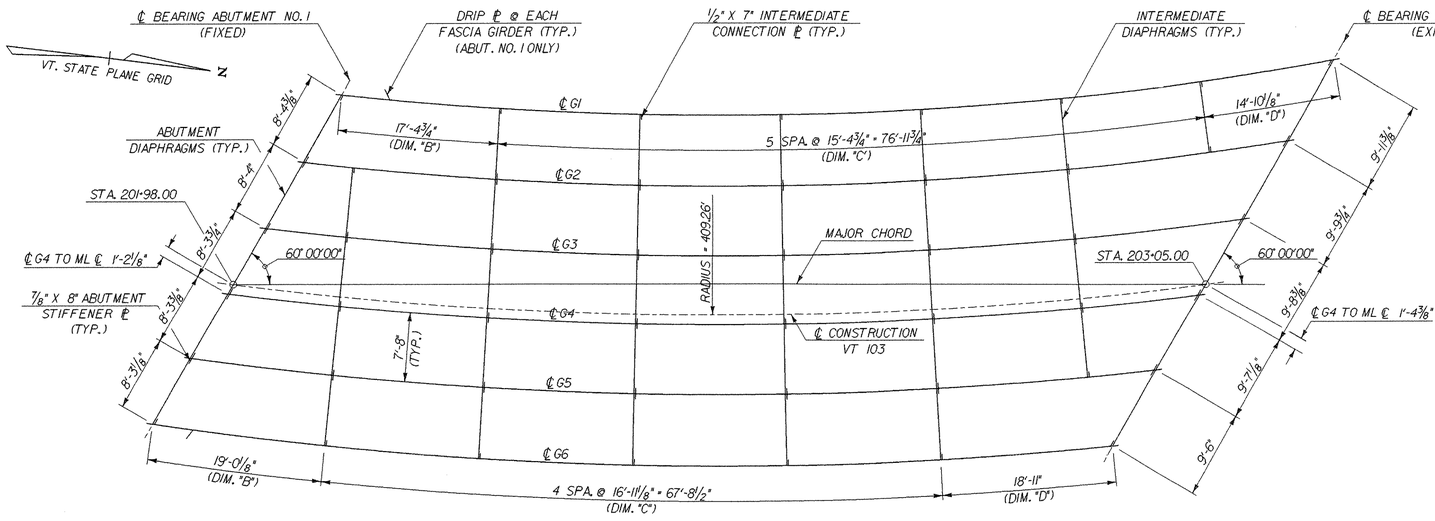
| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. |
| | Surv. Sta. |

VT 103 OVER THE WILLIAMS RIVER

BRIDGE DECK DETAILS

| | |
|---|---|
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By T. GRANT Date 10/00 | Bridge Design Supervisor M. ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\87bl34\Structures\zbl34cdd.dgn | zbl34cddJ |
| Bridge Sheet No. BRI07 | Sheet 51 of 79 |

PLOTTED 28-MAY-2003

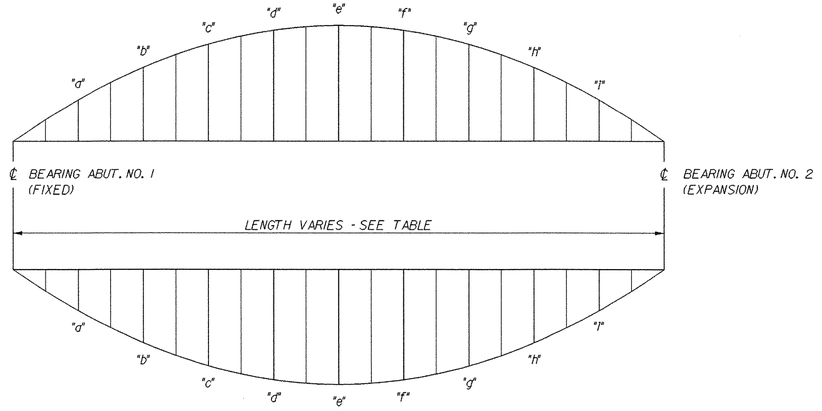



## FRAMING PLAN

SCALE: 1/8" = 1'-0"

## CAMBER DIAGRAM

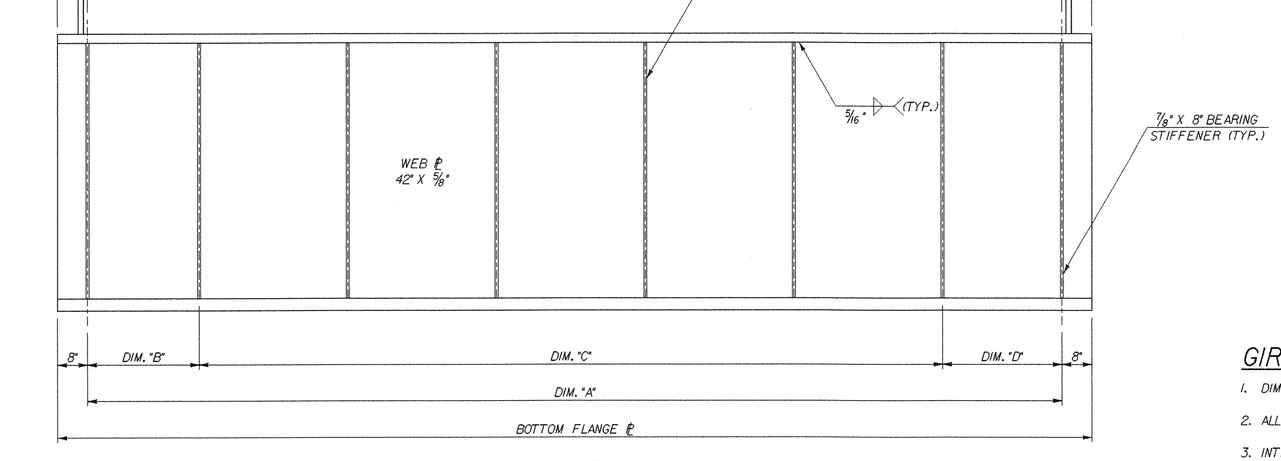
NOT TO SCALE




## DL DEFLECTION DIAGRAM

NOT TO SCALE

CAMBER AND DEFLECTION MEASUREMENTS
ARE GIVEN IN INCHES AT TENTH POINTS




## TYPICAL GIRDER ELEVATION

NOT TO SCALE

## TABLE OF GIRDER DIMENSIONS

| GIRDER | RADIUS | DIM. "A" | TOP FLANGE PLATE | BOTTOM FLANGE PLATE | DIM. "B" | DIM. "C" | DIM. "D" | DIM. "E" | "F" - NO. OF STUDS / GIRDER | DIM. "G" |
|---|---|---|---|---|---|---|---|---|---|---|
| G1 | 387.34 | 109'-3" | 7/8" X 1'-4" X 110'-7" | 1 1/2" X 1'-4" X 110'-7" | 17'-4 3/4" | 5 SPA. @ 15'-4 3/4" = 76'-11 3/4" | 14'-10 1/2" | 12" | 218 | 15 1/2" |
| G2 | 395.01 | 108'-4 3/4" | 7/8" X 1'-4" X 109'-8 3/4" | 1 1/2" X 1'-4" X 109'-8 3/4" | 5'-5" | 5 SPA. @ 15'-8 1/2" = 94'-3" | 24'-5 1/4" | 11" | 236 | 14 7/8" |
| G3 | 402.67 | 107'-7 1/2" | 7/8" X 1'-4" X 108'-11 1/2" | 1 1/2" X 1'-4" X 108'-11 1/2" | 8'-10" | 5 SPA. @ 16'-0 1/8" = 80'-0 5/8" | 18'-8 7/8" | 11" | 234 | 15 3/4" |
| G4 | 410.34 | 106'-10 7/8" | 7/8" X 1'-4" X 108'-2 7/8" | 1 1/2" X 1'-4" X 108'-2 7/8" | 12'-2 7/8" | 5 SPA. @ 16'-3 3/4" = 81'-6 3/4" | 13'-1 1/4" | 11" | 232 | 16 15/16" |
| G5 | 418.01 | 106'-2 7/8" | 1 1/2" X 1'-6" X 107'-6 7/8" | 2" X 1'-10" X 107'-6 7/8" | 15'-7 1/2" | 5 SPA. @ 16'-7 1/2" = 83'-1 1/2" | 7'-5 7/8" | 10 1/2" | 242 | 15 7/16" |
| G6 | 425.67 | 105'-7 3/8" | 1 1/2" X 1'-6" X 106'-11 3/8" | 2" X 1'-10" X 106'-11 3/8" | 19'-0 1/8" | 4 SPA. @ 16'-11 1/8" = 67'-8 1/2" | 18'-10 3/4" | 11" | 230 | 14 11/16" |

## CAMBER AND DL DEFLECTION ORDINATE SCHEDULE

L = TOTAL LENGTH ℄ BRG. ABUT. NO. 1 TO ℄ BRG. ABUT. NO. 2 = 107'-0"

| GIRDER NO. | | ℄ BRG. ABUT. NO. 1 | "a" 0.10L | "b" 0.20L | "c" 0.30L | "d" 0.40L | "e" 0.50L | "f" 0.60L | "g" 0.70L | "h" 0.80L | "i" 0.90L | ℄ BRG. ABUT. NO. 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CAMBER | 0" | 2 7/8" | 4 5/8" | 6 1/4" | 7 3/8" | 7 5/8" | 7 1/4" | 6 1/4" | 4 3/4" | 2 7/8" | 0" |
| | DL DEFLECTION | 0" | 1 13/16" | 3 3/8" | 4 5/8" | 5 3/8" | 5 5/8" | 5 3/8" | 4 9/16" | 3 5/16" | 1 3/4" | 0" |
| 2 | CAMBER | 0" | 2 7/8" | 4 5/8" | 6 1/4" | 7 1/8" | 7 1/2" | 7" | 6 1/8" | 4 1/2" | 2 5/8" | 0" |
| | DL DEFLECTION | 0" | 1 13/16" | 3 3/16" | 4 9/16" | 5 5/16" | 5 5/16" | 5 1/4" | 4 1/2" | 3 1/4" | 1 3/4" | 0" |
| 3 | CAMBER | 0" | 2 5/8" | 4 1/2" | 6 1/8" | 7" | 7 3/8" | 7" | 5 7/8" | 4 3/8" | 2 5/8" | 0" |
| | DL DEFLECTION | 0" | 1 3/4" | 3 5/16" | 4 1/2" | 5 3/16" | 5 1/16" | 5 3/16" | 4 1/16" | 3 3/16" | 1 3/4" | 0" |
| 4 | CAMBER | 0" | 2 1/2" | 4 3/8" | 5 7/8" | 6 3/4" | 7 1/8" | 6 7/8" | 5 3/4" | 4 1/4" | 2 5/8" | 0" |
| | DL DEFLECTION | 0" | 1 11/16" | 3 1/4" | 4 3/8" | 5 1/8" | 5 3/8" | 5 1/16" | 4 5/16" | 3 3/16" | 1 11/16" | 0" |
| 5 | CAMBER | 0" | 2 5/8" | 4 1/4" | 5 3/4" | 6 7/8" | 7" | 6 5/8" | 5 5/8" | 4 1/8" | 2 3/8" | 0" |
| | DL DEFLECTION | 0" | 1 3/4" | 3 1/4" | 4 3/8" | 5 1/8" | 5 5/16" | 5 1/16" | 4 5/16" | 3 1/8" | 1 5/8" | 0" |
| 6 | CAMBER | 0" | 2 5/8" | 4 3/8" | 5 7/8" | 6 3/4" | 7" | 6 3/4" | 5 3/4" | 4 3/4" | 2 1/2" | 0" |
| | DL DEFLECTION | 0" | 1 13/16" | 3 5/16" | 4 1/2" | 5 1/4" | 5 1/2" | 5 3/16" | 4 1/16" | 3 3/16" | 1 11/16" | 0" |

## GIRDER NOTES

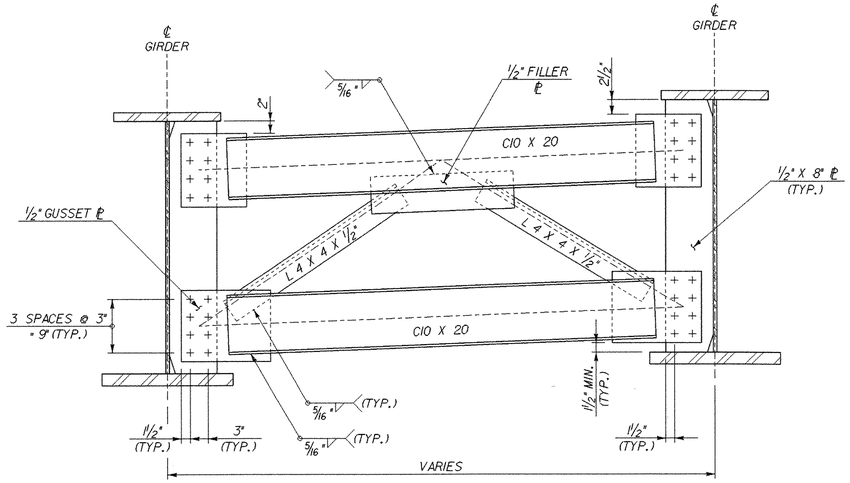
1. DIMENSIONS ARE ALONG THE ARC OF GIRDERS.
2. ALL NEW STEEL SHALL BE AASHTO M270 GRADE 50W.
3. INTERMEDIATE CROSS FRAMES ARE ON RADIAL LINES FROM THE CENTER OF THE CURVE.
4. BEARING STIFFENERS SHALL BE PLUMB AND PARALLEL TO THE ℄ BEARING IN THEIR FINAL POSITION.
5. CONNECTION PLATES AT INTERMEDIATE CROSS FRAMES SHALL BE PERPENDICULAR TO FLANGES.
6. ENDS OF GIRDERS SHALL BE FABRICATED TO BE PLUMB UNDER FULL DEAD LOAD AND SUPERIMPOSED DEAD LOAD.
7. ALL CROSS FRAMES, TENSION FLANGES, AND WEBS SHALL HAVE "CHARPY V-NOTCH TEST" PERFORMED AS SPECIFIED IN SUBSECTION 714.01 AND 714.03.
8. SHEAR CONNECTORS SHALL BE FIELD WELDED USING AUTOMATICALLY TIMED STUD WELDING EQUIPMENT AND SHALL BE PAID AS ITEM 508.15, SHEAR CONNECTORS.
9. ITEM 506.60, STRUCTURAL STEEL, SHALL INCLUDE GIRDERS, CONNECTION PLATES, DIAPHRAGMS, AND REQUIRED FASTENERS.

MCFARLAND - JOHNSON, INC.

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

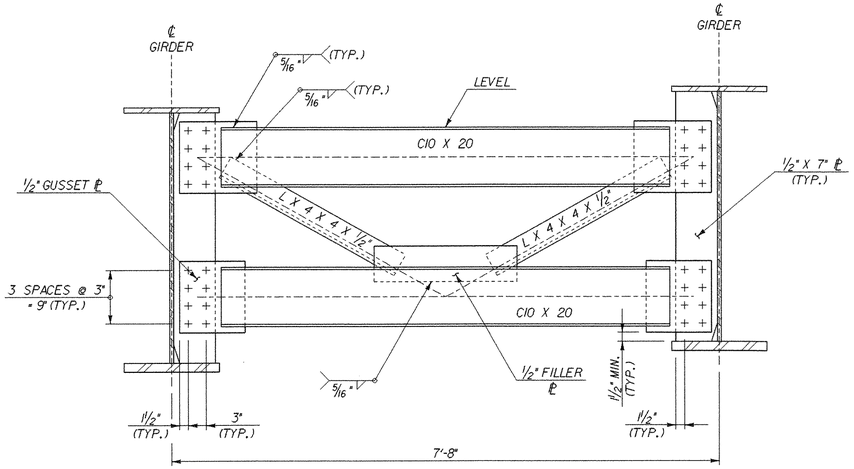
| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |
| VT 103 OVER THE WILLIAMS RIVER | |
| FRAMING PLAN AND GIRDER ELEVATION | |
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By T.GRANT Date 10/00 | Bridge Design Supervisor M.ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\87bl34\Structures\zbl34cfp.dgn | zbl34cfp.pl |
| Bridge Sheet No. BRI08 | Sheet 52 of 79 |

PLOTTED 28-MAY-2003




## ABUTMENT CROSS FRAME

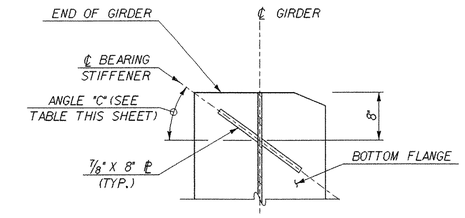
SCALE: 1" = 1'-0"



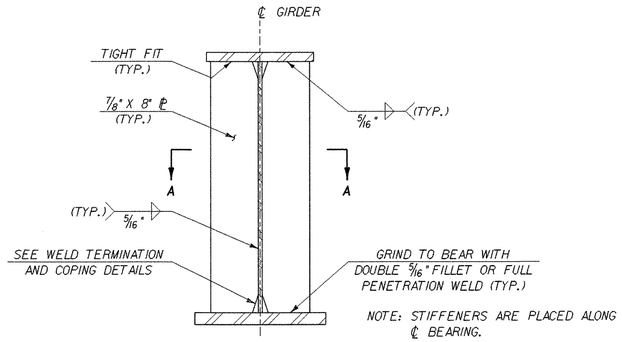

## INTERMEDIATE CROSS FRAME

SCALE: 1" = 1'-0"

| TABLE OF BEARING STIFFENER ANGLES | | |
|---|---|---|
| GIRDER NO. | ABUTMENT NO. 1 DIMENSION "C" | ABUTMENT NO. 2 DIMENSION "C" |
| 1 | 23°51'37" | 40°01'13" |
| 2 | 23°22'10" | 39°05'34" |
| 3 | 22°53'55" | 38°12'43" |
| 4 | 22°26'50" | 37°22'27" |
| 5 | 22°00'50" | 36°34'32" |
| 6 | 21°35'50" | 35°48'49" |



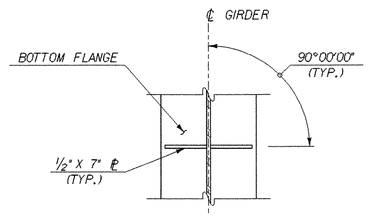

SECTION A-A



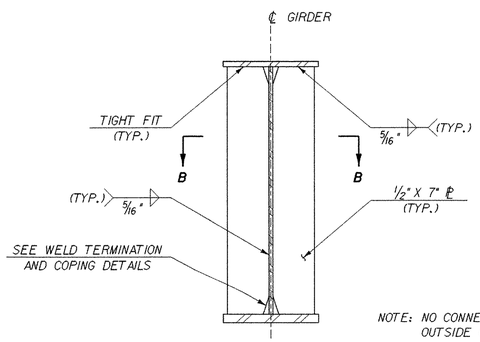

NOTE: STIFFENERS ARE PLACED ALONG ℄ BEARING.

## ABUTMENT BEARING STIFFENER

SCALE: 1" = 1'-0"



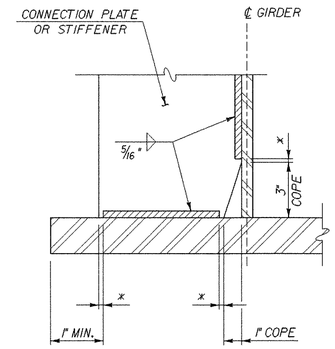

SECTION B-B




NOTE: NO CONNECTION PLATE AT OUTSIDE OF FASCIA GIRDER.

## INTERMEDIATE CROSS FRAME CONNECTION PLATE

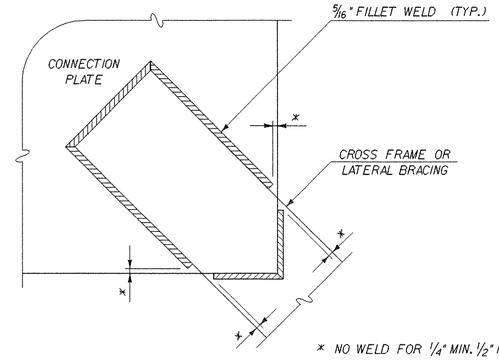
SCALE: 1" = 1'-0"




* NO WELD FOR 1/4" MIN. 1/2" MAX. (EXCEPT MUST MAINTAIN 1" MIN. FROM EDGE OF FLANGE)

## WELD TERMINATION AND COPING DETAILS

SCALE: 3" = 1'-0"




* NO WELD FOR 1/4" MIN. 1/2" MAX.

## WELD LOCATION DETAIL AT CROSS FRAMES AND LATERAL BRACING

SCALE: 3" = 1'-0"

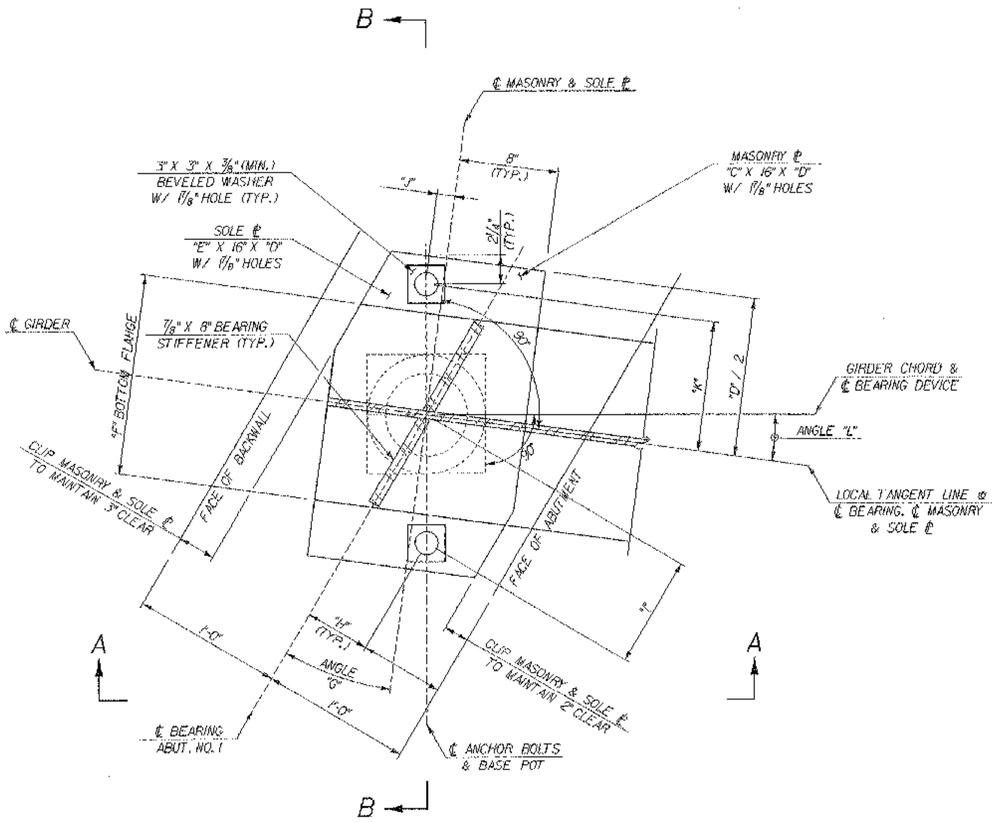
## NOTES

1. FOR SPACING OF CROSS FRAMES, SEE FRAMING PLAN DETAIL ON BRIDGE SHEET BRI08.

McFARLAND - JOHNSON, INC.

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |
| VT 103 OVER THE WILLIAMS RIVER | |
| CROSS FRAME DETAILS | |
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By T. GRANT Date 10/00 | Bridge Design Supervisor M. ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\87bl34\Structures\zbl34ccf.dgn | zbl34ccf1 |
| Bridge Sheet No. BRI09 | Sheet 53 of 79 |
| PLOTTED 28-MAY-2003 | |




PLAN VIEW

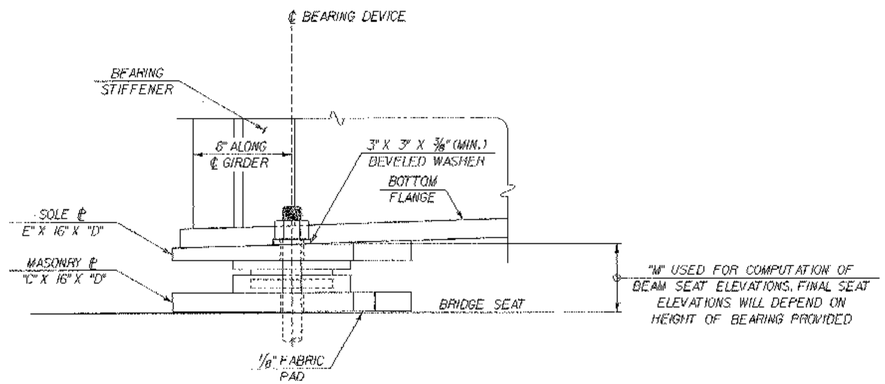
# COSMEC POT BEARINGS

## TABLE OF FIXED BEARING DIMENSIONS @ ABUTMENT NO. 1

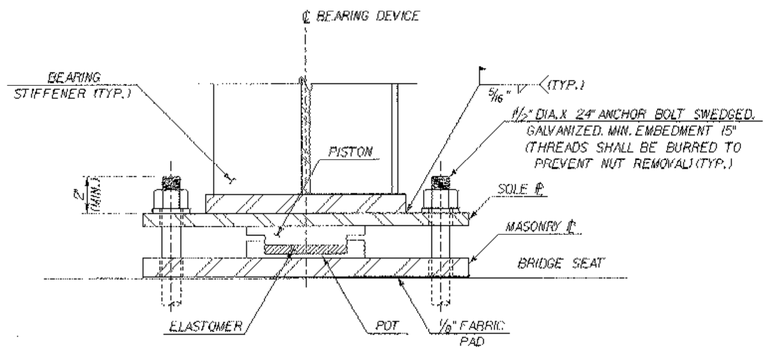
| GIRDER | PLATE THICKNESS DIM. "C" | PLATE LENGTH DIM. "D" | PLATE THICKNESS DIM. "E" | FLANGE WIDTH DIM. "F" | ANGLE "G" BETWEEN ℄ BRG. & ℄ MAS. ℄ | ℄ HOLE DIM. "H" | ℄ HOLE DIM. "I" | ℄ HOLE DIM. "J" | ℄ HOLE DIM. "K" | ANGLE "L" BETWEEN GIRDER CHORD & LOCAL TANGENT @ ℄ BRG. | HEIGHT "M" BETWEEN TOP OF BRIDGE SEAT & BOTTOM OF GIRDER FLANGE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| G1 | 1 1/2" | 25" | 1" TO 1 1/16" | 16" | 23°51'37" | 4 1/2" | 9 1/4" | 1 1/2" | 10 1/4" | 6°04'48" | 5 1/2" | |
| G2 | 1 1/2" | 25" | 1" TO 1 1/16" | 16" | 23°22'10" | 4 1/2" | 9 1/4" | 1 3/8" | 10 1/4" | 7°51'42" | 5 1/2" | 5 3/8" |
| G3 | 1 1/2" | 25" | 1" TO 1 1/16" | 16" | 22°53'55" | 4 1/2" | 9 1/4" | 1 3/8" | 10 1/4" | 7°39'24" | 5 1/2" | 5 3/8" |
| G4 | 1 1/2" | 25" | 1" TO 1 1/16" | 16" | 22°26'50" | 4 1/2" | 9 1/4" | 1 3/8" | 10 1/4" | 7°27'48" | 5 1/2" | 5 3/8" |
| G5 | 2 1/4" | 32" | 1" TO 1 1/16" | 22" | 22°00'50" | 4 1/2" | 1'-1" | 1 3/4" | 1'-1 3/4" | 7°16'51" | 6 1/4" | 6 1/8" |
| G6 | 2 1/4" | 32" | 1" TO 1 1/16" | 22" | 21°35'50" | 4 1/2" | 1'-1" | 1 1/8" | 1'-1 3/4" | 7°06'29" | 6 1/4" | 6 1/8" |

## BEARING NOTES

1. BEARINGS SHALL CONFORM TO APPLICABLE SUBSECTIONS OF SECTION 531 AND 731 AND SHALL BE PAID FOR UNDER THE ITEM 531.10 BEARING DEVICE ASSEMBLY.
2. THE FIELD WELD CONNECTING THE BOTTOM FLANGE WITH THE BEARING DEVICE SHALL BE MADE WITH E7018 RODS.
3. ALL BEARING DEVICES SHALL BE GALVANIZED OR METALIZED AS PER SECTION 531.04(b) AND 506.15(a) AND (b). AREAS OF GALVANIZING OR METALIZING DAMAGED BY FIELD WELDS OR HANDLING SHALL BE REPAIRED PER SUPPLEMENTAL SPECIFICATION 513.06(f)
4. ALTERNATE CONFIGURATIONS FOR BEARINGS MAY BE SUBMITTED FOR APPROVAL. ANY ALTERNATE SUBMITTED SHALL BE DESIGNED AND CERTIFIED TO MEET THE DESIGN LOADS AND CRITERIA SHOWN ON THIS SHEET, AND SHALL MAINTAIN THE ANCHORAGE SYSTEM SHOWN.
5. BRIDGE SEAT ELEVATIONS MAY BE REVISED TO ACCOMMODATE AN ALTERNATE CONFIGURATION. POT BEARING HEIGHTS VARY BETWEEN MANUFACTURERS AND NEED TO BE INCORPORATED APPROPRIATELY BY THE CONTRACTOR.
6. THE CONCRETE SURFACE UNDER THE BEARING DEVICE SHALL BE LEVEL.
7. "A" DISTANCE IS THE FINAL SETTING FOR THE BEARING PAD AFTER THE CONCRETE SLAB, PAVEMENT, AND BRIDGE RAIL ARE PLACED. "B" DISTANCE IS LISTED FOR SETTING THE BEARING AFTER THE STRUCTURAL STEEL IS ERECTED AND BEFORE THE CONCRETE DECK IS POURED. THE DIFFERENCE IS THE THEORETICAL ELONGATION OF THE BOTTOM FLANGE DUE TO DEAD LOAD DEFLECTION. THE FINAL "A" DISTANCE, AS SHOWN IN THE TABLE, MUST BE ATTAINED WITHIN 1/8".
8. DESIGN CRITERIA:
   A. BASE PLATE TO CONCRETE MAXIMUM DESIGN PRESSURE = 1000 PSI
   B. MINIMUM ALLOWABLE DESIGN ROTATION = 0.015 RADIANS
   C. HORIZONTAL CAPACITY SHALL BE A MINIMUM OF 10% OF VERTICAL LOAD. GUIDE BARS SHALL BE DESIGNED FOR THIS CAPACITY.
   D. DESIGN LOAD PER BEARING = 182K AT ABUTMENT NO. 1 AND 193K AT ABUTMENT NO. 2.




SECTION A-A




SECTION B-B

## FIXED BEARING DETAIL @ ABUTMENT NO. 1

SCALE: 2" = 1'-0"

M^cFARLAND - JOHNSON, INC.

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log. Sta. / Surv. Sta. |
| VT 103 OVER THE WILLIAMS RIVER | |
| ABUTMENT NO. 1 FIXED BEARING DETAILS | |
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By T. GRANT Date 10/00 | Bridge Design Supervisor M. ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\97bl34\Structures\zbl34efbdgn | zbl34efbd |
| Bridge Sheet No. BR110 | Sheet 54 of 79 |
| PLOTTED 28-MAY-2003 | |

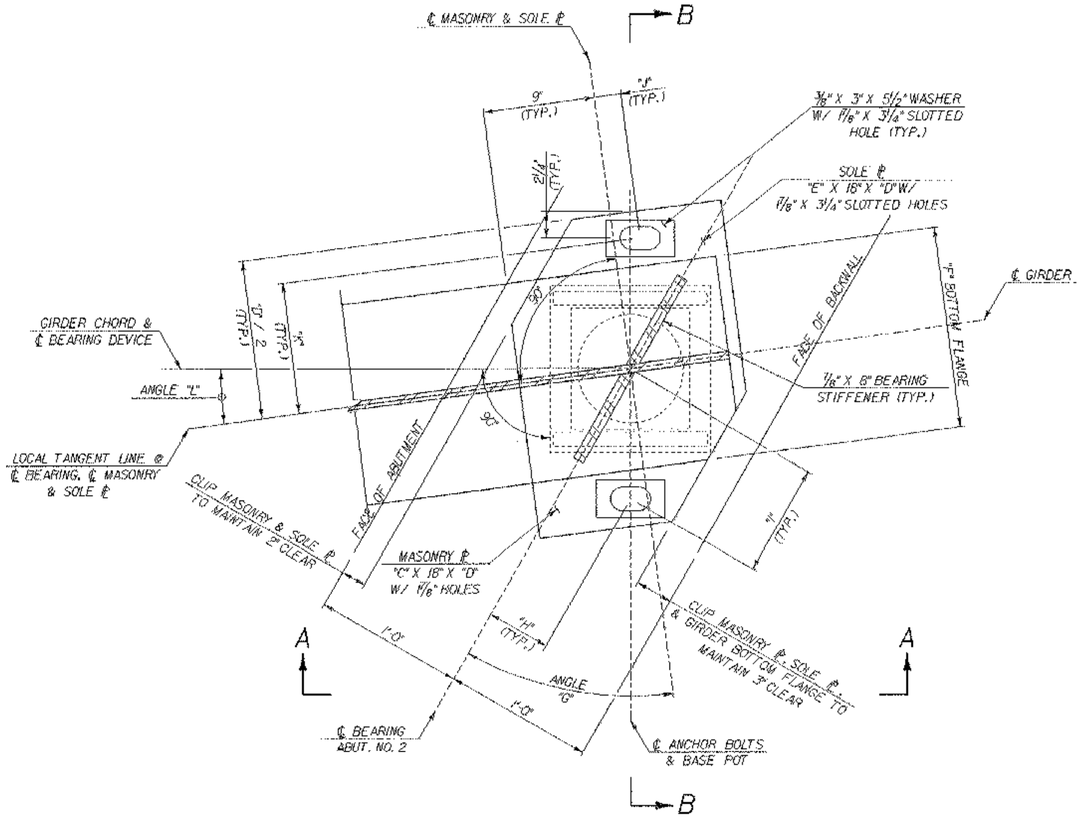
COSMEC POT BEARINGS USED

## TABLE OF EXPANSION BEARING DIMENSIONS @ ABUTMENT NO. 2

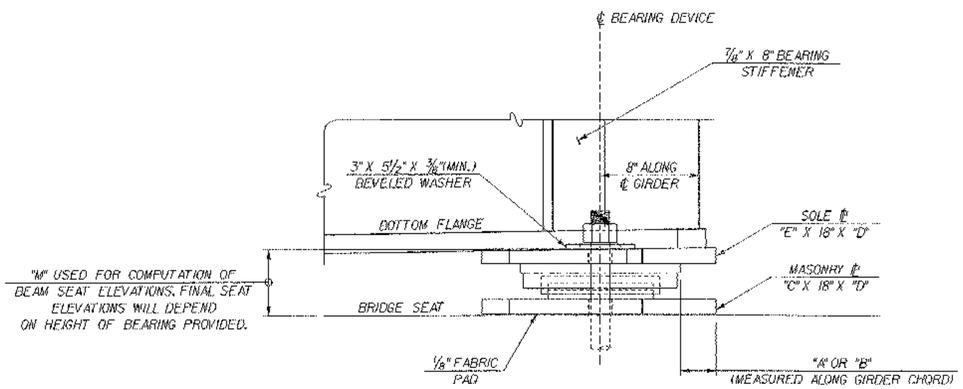
| GIRDER | PLATE THICKNESS DIM."C" | PLATE LENGTH DIM."D" | PLATE THICKNESS DIM."E" | FLANGE WIDTH DIM."F" | ANGLE "G" BETWEEN ℄ BRG. & ℄ MAS. ℄ | ℄ HOLE DIM."H" | ℄ HOLE DIM."I" | ℄ HOLE DIM."J" | ℄ HOLE DIM."K" | ANGLE "L" BETWEEN GIRDER CHORD & LOCAL TANGENT @ ℄ BRG. | HEIGHT "M" BETWEEN TOP OF BRIDGE SEAT & BOTTOM OF GIRDER FLANGE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| G1 | 1 1/8" | 25" | 1" TO 1 1/4" | 16" | 40°01'13" | 5 1/2" | 6 3/4" | 2 3/4" | 10 1/4" | 6°04'48" | ~~5 1/4"~~ 6 3/16" |
| G2 | 1 1/8" | 25" | 1" TO 1 1/4" | 16" | 39°05'34" | 5 5/16" | 6 5/8" | 2 1/2" | 10 1/4" | 7°51'42" | ~~5 1/4"~~ 6 3/16" |
| G3 | 1 1/8" | 25" | 1" TO 1 1/4" | 16" | 38°12'43" | 5 1/4" | 6 1/8" | 2 3/8" | 10 1/4" | 7°39'24" | ~~5 1/4"~~ 6 3/16" |
| G4 | 1 1/8" | 25" | 1" TO 1 1/4" | 16" | 37°21'27" | 5 1/8" | 9" | 2 1/8" | 10 1/4" | 7°27'48" | ~~5 1/4"~~ 6 3/16" |
| G5 | 1 1/8" | 32" | 1" TO 1 1/4" | 22" | 36°34'32" | 6 3/4" | 1'-0 1/8" | 4 5/16" | 1'- 1 3/4" | 7°16'51" | ~~6"~~ 7 5/16" |
| G6 | 1 1/8" | 32" | 1" TO 1 1/4" | 22" | 35°48'49" | 5 5/16" | 1'-0 1/8" | 4 1/8" | 1'- 1 3/4" | 7°06'29" | ~~6"~~ 7 5/16" |

## BEARING NOTES

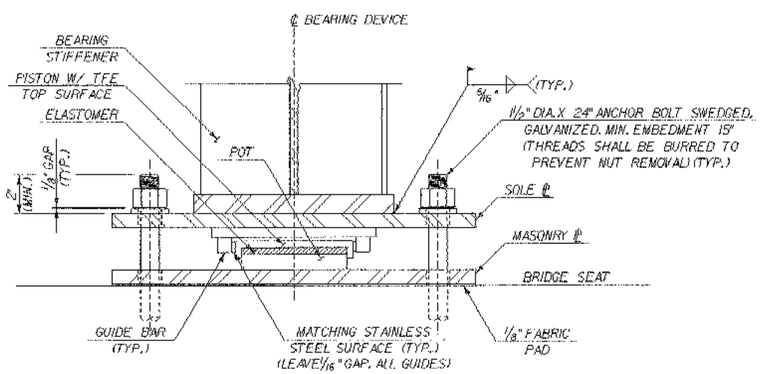
1. FOR BEARING NOTES, SEE BRIDGE SHEET 54 of 79.




PLAN VIEW




SECTION A-A




SECTION B-B

## ABUTMENT NO. 2 TEMPERATURE SETTING TABLE

| TEMP. | "A" DIST. | "B" DIST. |
|---|---|---|
| 0° F | 3 1/4" | 3 7/8" |
| 15° F | 3 1/8" | 3 3/4" |
| 30° F | 3" | 3 5/8" |
| 45° F | 2 7/8" | 3 1/2" |
| 60° F | 2 3/4" | 3 3/8" |
| 75° F | 2 5/8" | 3 1/4" |
| 90° F | 2 1/2" | 3 1/16" |
| 105° F | 2 3/8" | 3" |

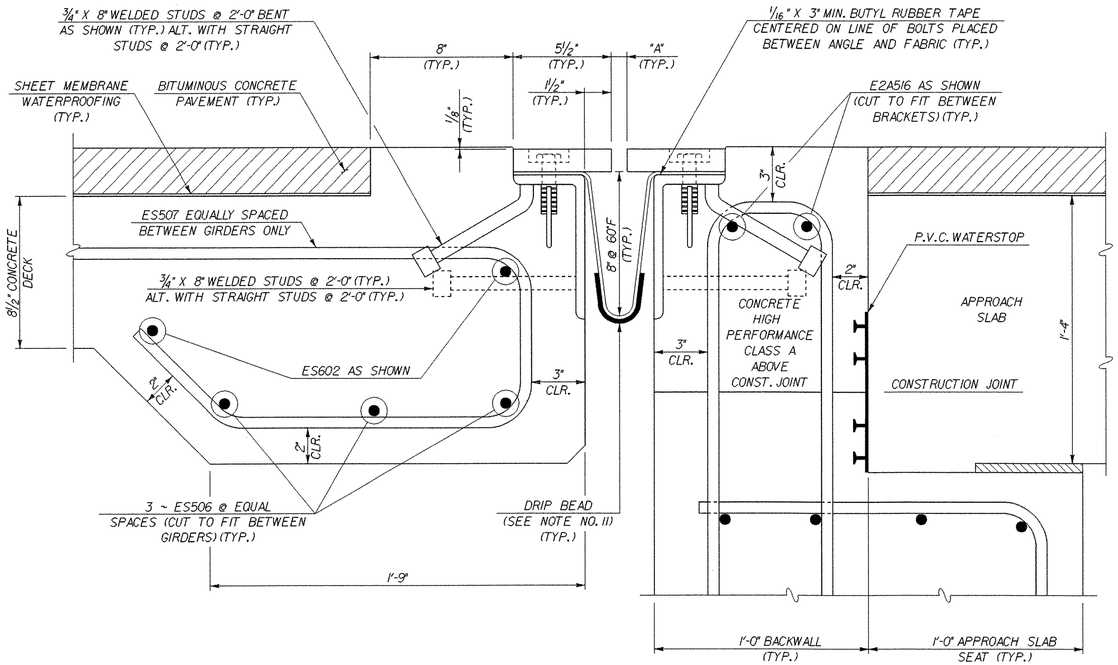
## EXPANSION BEARING DETAIL @ ABUTMENT NO. 2

SCALE: 2" - 1'-0"

McFARLAND - JOHNSON, INC.

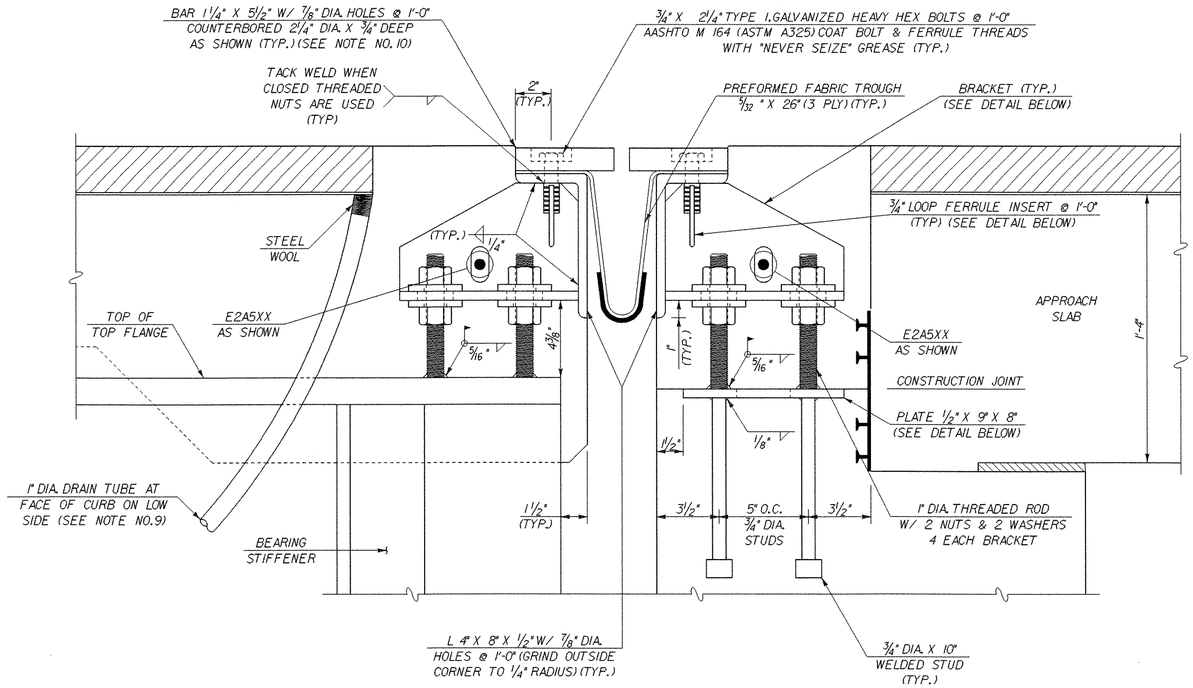
STATE OF VERMONT
AGENCY OF TRANSPORTATION

| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |
| VT 103 OVER THE WILLIAMS RIVER | |
| ABUTMENT NO. 2 EXPANSION BEARING DETAILS | |
| Designed By L.WILKSON | Drawn By P.DUSTIN |
| Checked By T. GRANT Date 10/09 | Bridge Design Supervisor M. ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\ST\bl34\Structures\zbl34ceb.dgn | zbl34ceb.bl |
| Bridge Sheet No. BRIII | Sheet 55 of 79 |
| PLOTTED 28-MAY-2003 | |




## TYPICAL SECTION BETWEEN GIRDERS

SCALE: 3" = 1'-0"

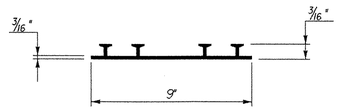



## TYPICAL SECTION AT GIRDERS

SCALE: 3" = 1'-0"

## EXPANSION JOINT NOTES

1. DETAILS ON THIS SHEET ARE FOR ITEM 516.10 "BRIDGE EXPANSION JOINT".
2. PREFORMED FABRIC MATERIAL SHALL BE CONTINUOUS AND SHALL CONFORM TO SUBSECTION 707.07. THE HIGH END OF THE FABRIC TROUGH SHALL BE CLOSED BY FOLDING.
3. BUTYL RUBBER TAPE SHALL CONFORM TO AASHTO SPECIFICATION M-198, TYPE II.
4. THE FINAL FINISH OF THE EXPANSION DEVICE SHALL BE COVERED DURING THE PLACING OF BRIDGE DECK CONCRETE.
5. ALL STEEL COMPONENTS SHALL BE AASHTO M270 GRADE 36 GALVANIZED OR METALIZED AS PER SUBSECTION 506.15 (a) OR (b) UNLESS OTHERWISE SPECIFIED.
6. THE ITEM "BRIDGE EXPANSION JOINT" SHALL INCLUDE THE FABRICATION AND ERECTION OF THE COMPLETE JOINT ASSEMBLY INCLUDING ALL STEEL PLATES, BRACKETS, ANGLES, WELDED STUDS OR RODS, PREFORMED FABRIC DRAIN TROUGH MATERIAL AND PLASTIC DRAIN TUBES, BUTYL RUBBER TAPE AND ANY OTHER MISCELLANEOUS MATERIAL NECESSARY TO INSTALL JOINT.
7. THE 4" X 8" X 1/2" ANGLES SHALL BE FURNISHED AS ONE CONTINUOUS PIECE. THE 15/16" X 5 5/16" BARS EACH SIDE OF THE JOINT SHALL BE PROVIDED IN TWO EQUAL LENGTHS.
8. COAT CONCRETE CONTACT SURFACES WITH EPOXY BONDING COMPOUND MEETING THE REQUIREMENTS OF SUBSECTION 719.02. PAYMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 516.10 "BRIDGE EXPANSION JOINT".
9. A 1" DIAMETER PLASTIC DRAIN TUBE (PER STD. SPEC. 740.01) SHALL BE INSTALLED AS SHOWN AT THE FACE OF CURB. THE UPPER END IS TO BE PLUGGED WITH STEEL WOOL AND THE LOWER END IS TO EXTEND BELOW THE BOTTOM OF THE ADJACENT STRINGER. THE DRAIN TUBES SHALL BE FASTENED TO THE STRINGERS USING A METHOD APPROVED BY THE ENGINEER.
10. FILL COUNTERBORED HOLES IN THE JOINT PLATE WITH HOT POURED JOINT SEALER AFTER BOLT INSTALLATION. PAYMENT FOR THE WORK SHALL BE SUBSIDIARY TO ITEM 516.10.
11. A DRIP BEAD OF 1/4" X 7" STRIP OF PREFORMED MATERIAL SHALL BE CEMENTED TO THE BOTTOM OF THE FABRIC TROUGH USING AN ADHESIVE APPROVED BY THE MANUFACTURER. THE DRIP BEAD SHALL BE APPLIED 1" FROM THE DOWNSPOUT END OF THE TROUGH.
12. FABRIC TROUGH SHALL BE THOROUGHLY CLEANED AND FLUSHED AFTER PAVING OPERATION.
13. THE EXPANSION JOINT SHALL BE SHOP ASSEMBLED AND SHIPPED AS ONE UNIT.
14. THE COSTS FOR P.V.C. WATERSTOP SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONCRETE. OTHER CONFIGURATIONS MAY BE USED UPON APPROVAL OF THE STRUCTURES ENGINEER.




## P.V.C. WATERSTOP FOR CONST. JOINTS

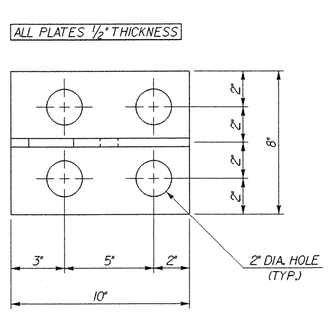
SCALE: 3" = 1'-0"



NOTE: CLOSED THREADED FERRULE NUTS WITHOUT ANCHOR LOOPS MAY BE USED.

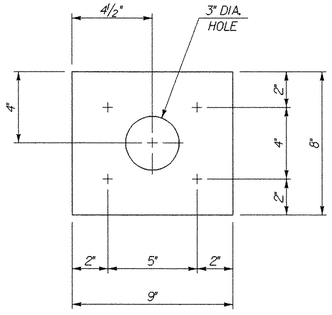
## LOOP FERRULE INSERT DETAIL

SCALE: 3" = 1'-0"




## BRACKET PLAN

SCALE: 3" = 1'-0"



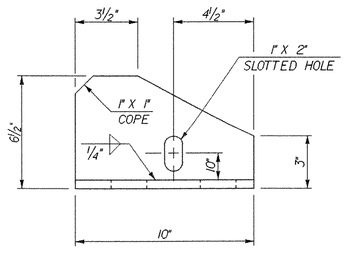

## PLATE PLAN

SCALE: 3" = 1'-0"

## JOINT DIMENSION TABLE

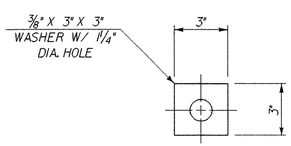
| TEMP. | "A" DIST. |
|---|---|
| 0° F | 1 1/4" |
| 15° F | 1 1/8" |
| 30° F | 1" |
| 45° F | 7/8" |
| 60° F | 3/4" |
| 75° F | 5/8" |
| 90° F | 1/2" |
| 105° F | 3/8" |

"A" IS THE SETTING BEFORE DEAD LOADS ARE IN PLACE.




## BRACKET ELEVATION

SCALE: 3" = 1'-0"




## WASHER FOR BRACKET

SCALE: 3" = 1'-0"

MCFARLAND - JOHNSON, INC.

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

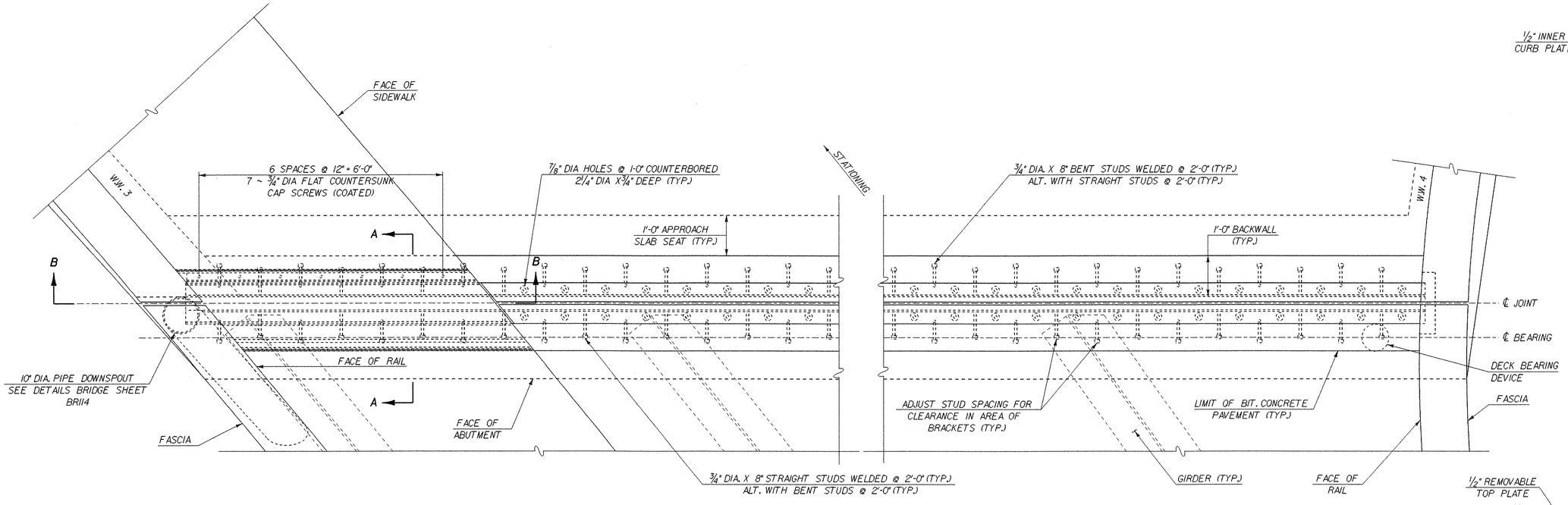
| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |

VT 103 OVER THE WILLIAMS RIVER

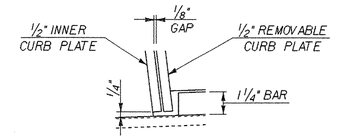
EXPANSION JOINT DETAILS

| | |
|---|---|
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By T.GRANT Date 10/00 | Bridge Design Supervisor M. ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\87bl34\Structures\zbl34cjd.dgn | zbl34cjdJ |
| Bridge Sheet No. BRII2 | Sheet 56 of 79 |

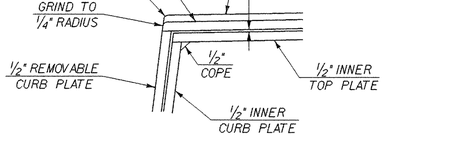
PLOTTED 28-MAY-2003



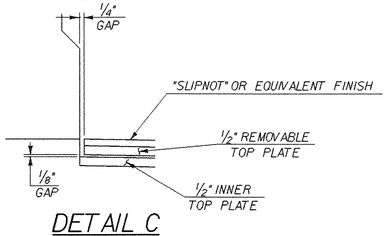

## PLAN
SCALE: 3/4" = 1'-0



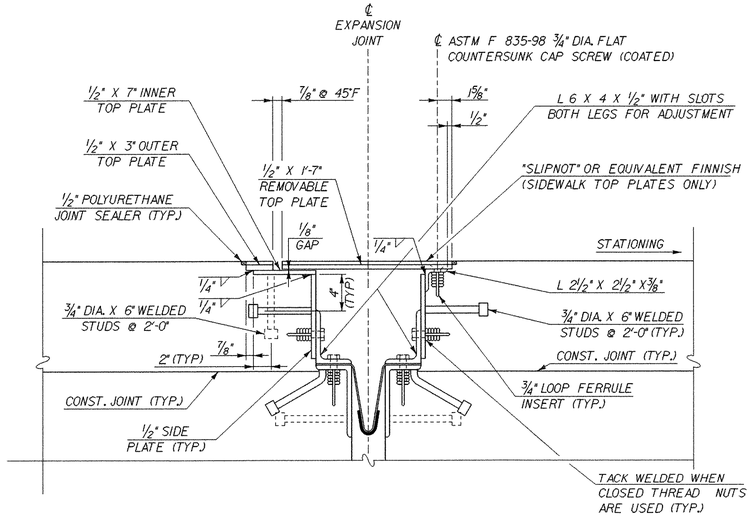

## DETAIL B
SCALE: 3" = 1'-0"



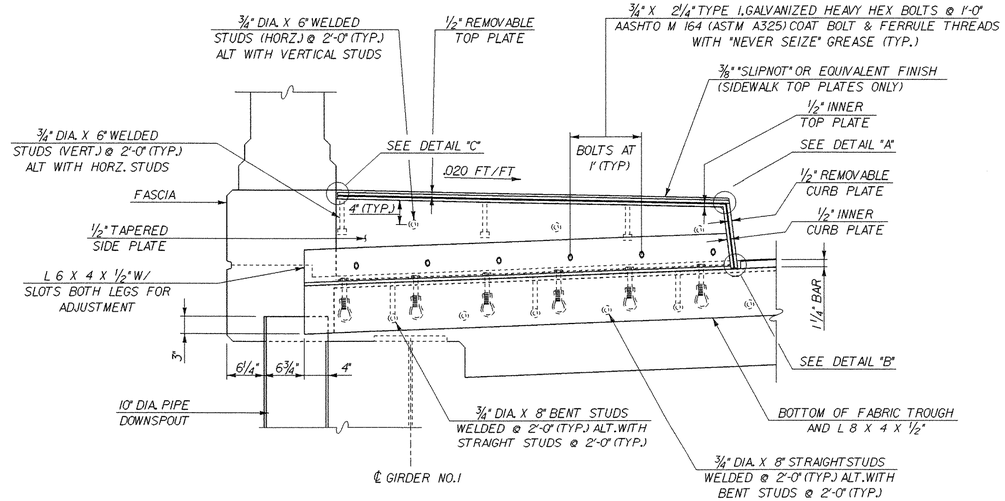

## DETAIL A
SCALE: 3" = 1'-0"




## DETAIL C
SCALE: 3" = 1'-0"




## SECTION A-A
SCALE: 1/2" = 1'-0"
(NORMAL TO BEARING)
(REINFORCING NOT SHOWN)

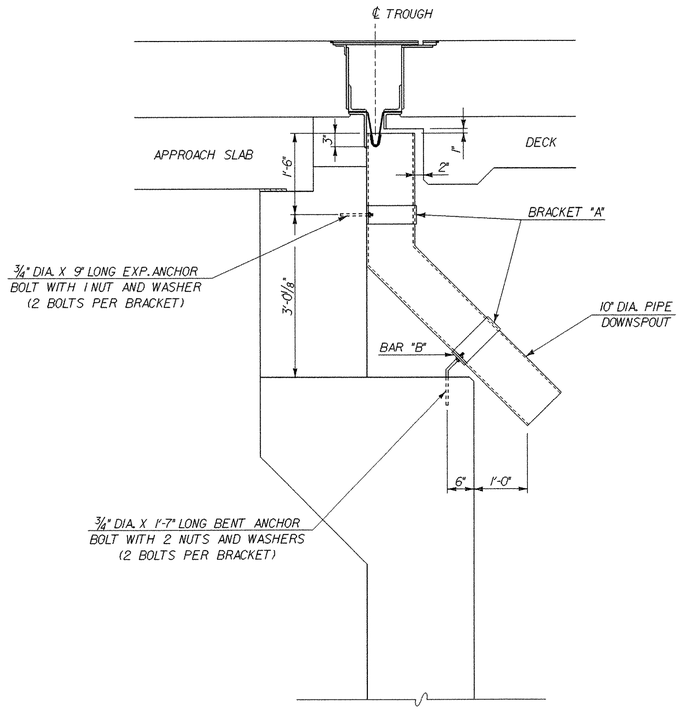



## SECTION B-B
SCALE: 1" = 1'-0"

McFARLAND - JOHNSON, INC.

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

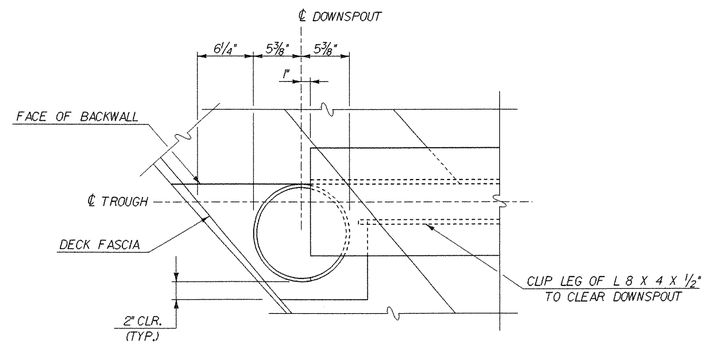
| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |
| VT 103 OVER THE WILLIAMS RIVER | |
| EXPANSION JOINT PLAN | |
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By T. GRANT — Date 10/00 | Bridge Design Supervisor M. ZYDEL — Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\87bl34\Structures\zbl34cjp.dgn | zbl34cjpj |
| Bridge Sheet No. BRII3 | Sheet 57 of 79 |
| PLOTTED 28-MAY-2003 | |




## DOWNSPOUT ELEVATION

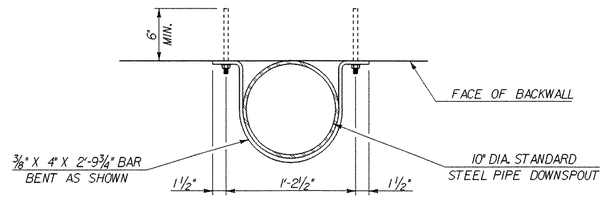
SCALE: 3/4" = 1'-0"

(PERPENDICULAR TO CENTERLINE TROUGH

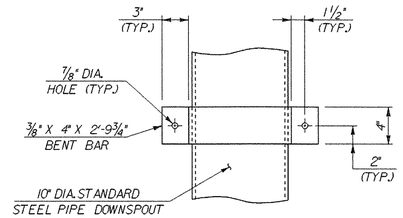



## PLAN VIEW OF DECK BOXOUT FOR DOWNSPOUT

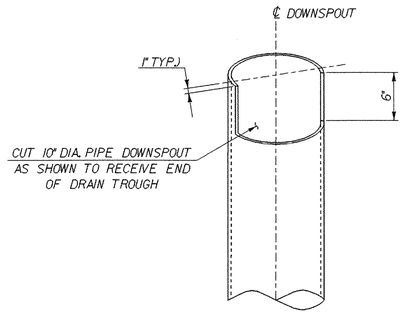
SCALE: 1 1/2" = 1'-0"




## PLAN VIEW

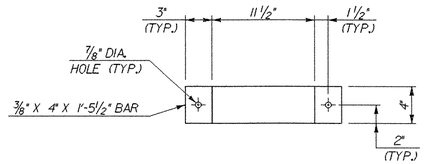



## ELEVATION VIEW OF BRACKET "A"

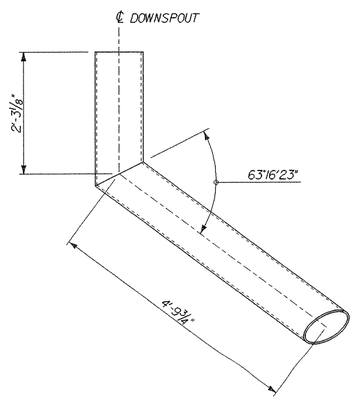



## DOWNSPOUT CUTOUT FOR TROUGH

SCALE: 1 1/2" = 1'-0"




## ELEVATION VIEW OF BAR "B"




## DOWNSPOUT FABRICATION DETAIL

SCALE: 3/4" = 1'-0"

## DOWNSPOUT NOTES

1. HOLLOW STRUCTURAL STEEL PIPE SHALL CONFORM TO ASTM A 501 OR A 53, TYPE S, GRADE B.
2. ALL PLATES, BARS AND ANGLES SHALL CONFORM TO AASHTO M 270, GRADE 36.
3. DOWNSPOUTS AND BRACKETS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 123 AFTER FABRICATION.
4. ALL BOLTS AND RELATED HARDWARE SHALL BE ASTM A 307 AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153 (AASHTO M 232).
5. ANY PLACE WHERE THE GALVANIZING HAS BEEN REMOVED FROM THE DOWNSPOUT OR BRACKETS, BY CUTTING, BURNING, WELDING, PLACING OR ANY OTHER MEANS, SHALL BE REPAIRED AS PER SUPPLEMENTAL SPECIFICATION 513.06(f)
6. PAYMENT FOR ALL MATERIALS AND LABOR RELATED TO THE DOWNSPOUT ARE TO BE SUBSIDIARY TO THE ITEM 516.10, "BRIDGE EXPANSION JOINT."

## DETAILS FOR ATTACHING DOWNSPOUT TO ABUTMENT

SCALE: 1 1/2" = 1'-0"

M^cFARLAND - JOHNSON, INC.

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

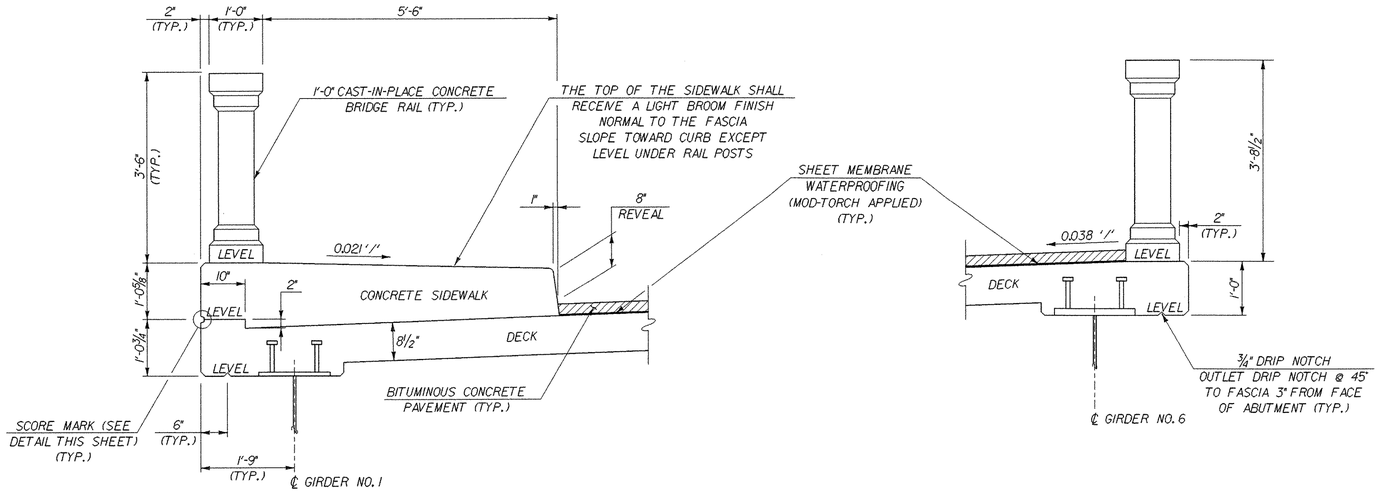
| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |

VT 103 OVER THE WILLIAMS RIVER

DOWNSPOUT DETAILS

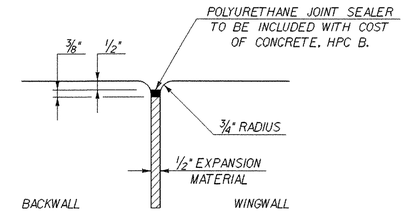
| | |
|---|---|
| Designed By S.DELIA | Drawn By S.DELIA |
| Checked By T. GRANT Date 10/00 | Bridge Design Supervisor M. ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\87bl34\Structures\zbl34cjm.dgn | zbl34cjmJ |
| Bridge Sheet No. BRII4 | Sheet 58 of 79 |

PLOTTED 28-MAY-2003



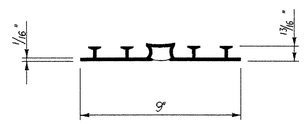

## SIDEWALK AND RAIL SECTION

SCALE: ¾" = 1'-0"



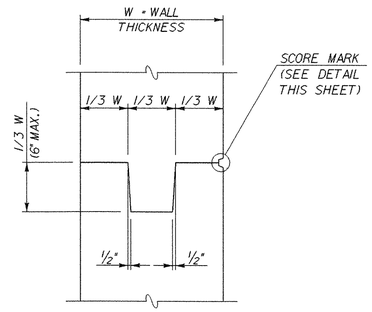

## JOINT BETWEEN BACKWALL AND WINGWALL

N.T.S.



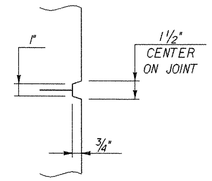

## P.V.C. WATERSTOP FOR EXPANSION JOINTS

SCALE: 3" = 1'-0"



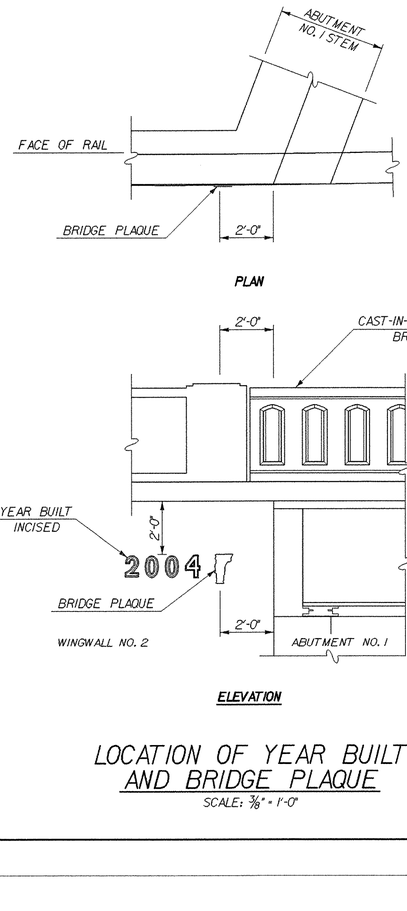

## TYPICAL CONCRETE CONSTRUCTION JOINT

SCALE: 1" = 1'-0"

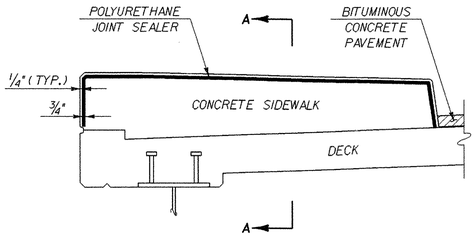



## SCORE MARK DETAIL

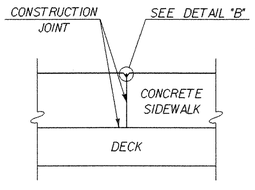
SCALE: 2" = 1'-0"

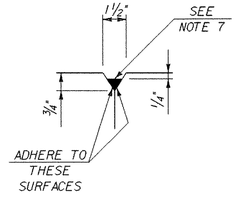



PLAN




SECTION A-A

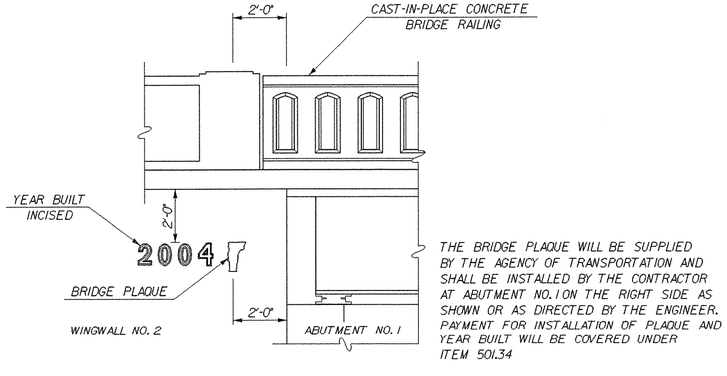



DETAIL "B"

## CONCRETE SIDEWALK CONSTRUCTION JOINT

NOT TO SCALE



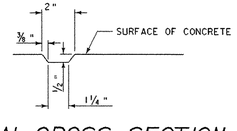

ELEVATION

THE BRIDGE PLAQUE WILL BE SUPPLIED BY THE AGENCY OF TRANSPORTATION AND SHALL BE INSTALLED BY THE CONTRACTOR AT ABUTMENT NO. 1 ON THE RIGHT SIDE AS SHOWN OR AS DIRECTED BY THE ENGINEER. PAYMENT FOR INSTALLATION OF PLAQUE AND YEAR BUILT WILL BE COVERED UNDER ITEM 501.34

## LOCATION OF YEAR BUILT AND BRIDGE PLAQUE

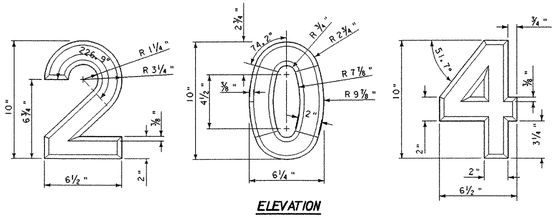
SCALE: ⅞" = 1'-0"

Space Between Numbers = 1¼"
NUMBER DIMENSIONS




## TYPICAL CROSS SECTION OF NUMBER

N.T.S.




ELEVATION

## INCISED NUMBERS DETAIL

N.T.S.

## NOTES

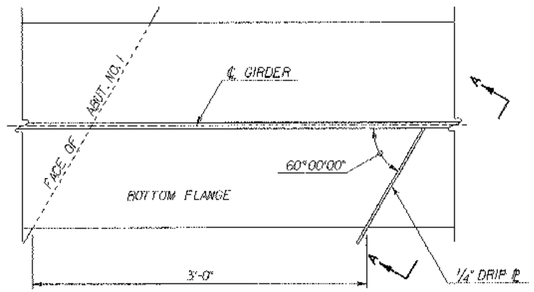
1. THE COSTS FOR P.V.C. WATERSTOP SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 501.34, CONCRETE, HIGH PERFORMANCE CLASS B. OTHER CONFIGURATIONS MAY BE USED UPON APPROVAL OF THE STRUCTURES ENGINEER.
2. CONSTRUCTION JOINTS THROUGH CONCRETE SIDEWALK SHALL BE SPACED A MAXIMUM OF 20 FEET CENTER TO CENTER. CONCRETE SHALL BE PLACED IN ALTERNATING SECTIONS WITH A MINIMUM OF 48 HOURS DELAY BETWEEN ADJACENT POURS.
3. LONGITUDINAL REINFORCING SHALL PASS THROUGH CONCRETE SIDEWALK CONSTRUCTION JOINTS.
4. POLYURETHANE MEMBRANE AND BLAST CLEANING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR SHEET MEMBRANE WATERPROOFING (MOD-TORCH APPLIED).
5. SHEET MEMBRANE WATERPROOFING SHALL EXTEND TO FACE OF SIDEWALK AS SHOWN THIS SHEET.
6. CONCRETE IN SIDEWALK SHALL BE CONCRETE, HIGH PERFORMANCE CLASS A.
7. POLYURETHANE JOINT SEALER, PER SUBSECTION 524.06(c), COLOR TO MATCH CONCRETE. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR CONCRETE.

McFARLAND - JOHNSON, INC.

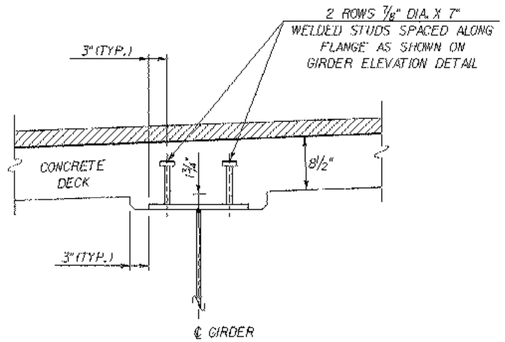
# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |
| VT 103 OVER THE WILLIAMS RIVER | |
| MISCELLANEOUS DETAILS SHEET - 1 | |
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By T. GRANT Date 10/00 | Bridge Design Supervisor M. ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\87bl34\Structures\zbl34cml.dgn | zbl34cmlJ |
| Bridge Sheet No. BRI15 | Sheet 59 of 79 |

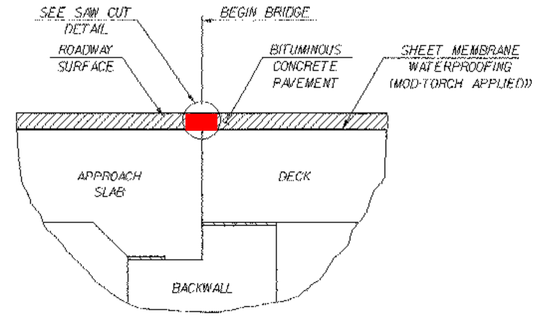
PLOTTED 28-MAY-2003



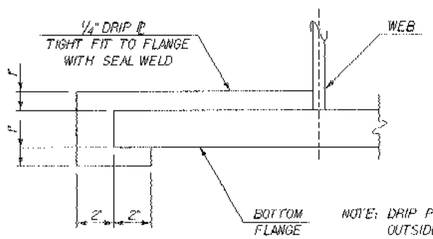

## DRIP PLATE PLAN
SCALE: 1 1/2" = 1'-0"




## BEAM HAUNCH AND SHEAR CONNECTOR DETAIL
SCALE: 1" = 1'-0"

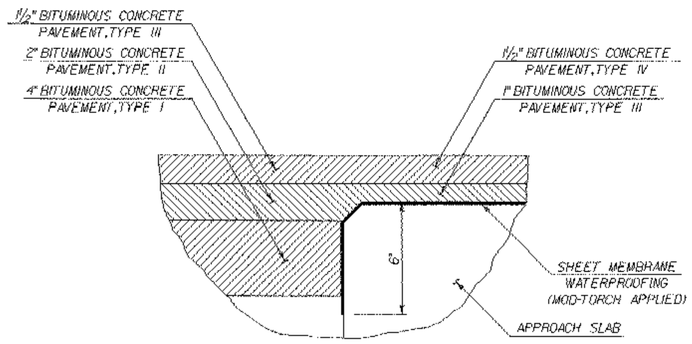



## DETAIL FOR JOINT IN PAVEMENT
SCALE: 1"-1'-0"

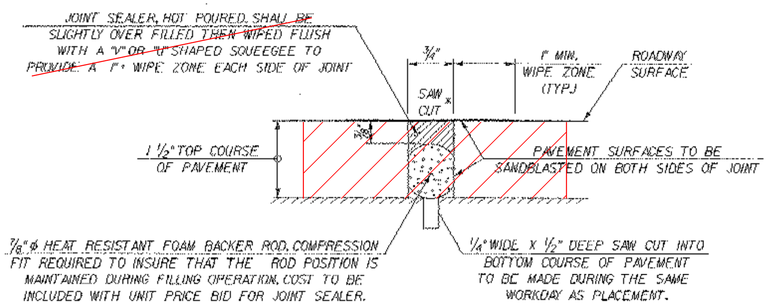



NOTE: DRIP PLATES SHALL BE PLACED ON OUTSIDE EDGE OF FASCIA GIRDERS. SEE FRAMING PLAN FOR LOCATION, BRIDGE SHEET BRI08.

## DRIP PLATE SECTION A-A
SCALE: 3" = 1'-0"



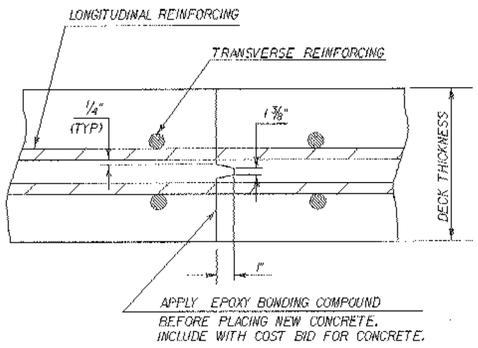

## SHEET MEMBRANE DETAIL AT END OF APPROACH SLAB
SCALE: 3"-1'-0"



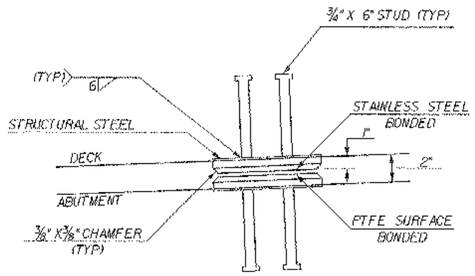

ASPHALTIC PLUG JOINT SA/CO #1 (11-10-04)

* JOINT IS TO BE LOCATED ACCURATELY BY STRING LINING, OR OTHER MEANS, PRIOR TO PAVING, SO THAT THE SAW CUTS WILL BE MADE DIRECTLY OVER THE END OF CONCRETE DECK. JOINT SHALL BE CUT DRY IN A SINGLE PASS AND BE SEALED WITHIN 24 HOURS OR PRIOR TO EXPOSURE TO TRAFFIC. JOINT SHALL BE CLEANED PRIOR TO APPLYING THE JOINT SEALER. SEE VT SPECIFICATION 524 AND SPECIAL PROVISIONS.

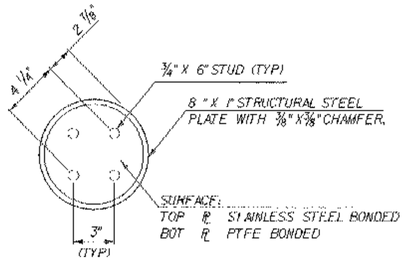
## SAW CUT JOINT DETAIL
N.T.S.




## TRANSVERSE BRIDGE SLAB CONSTRUCTION JOINT DETAILS
NTS




ELEVATION




PLAN

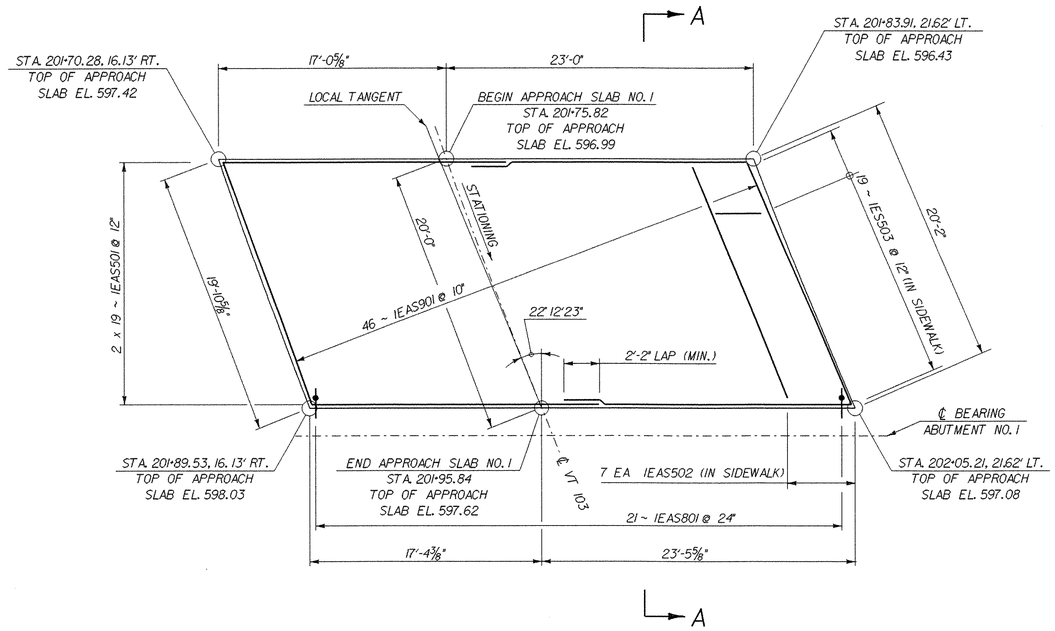
SEE BEARING DETAIL SHEET 54 OF 79 FOR MORE INFORMATION

## DECK BEARING DEVICE DETAIL
N.T.S.

McFARLAND-JOHNSON, INC.

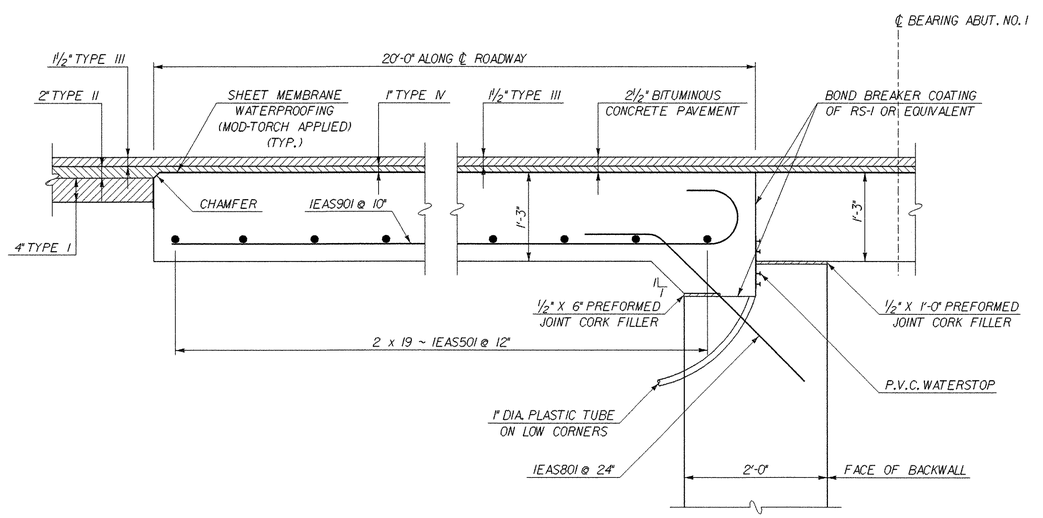
# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |
| VT 103 OVER THE WILLIAMS RIVER | |
| MISCELLANEOUS DETAILS SHEET - 2 | |
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By T. GRANT Date 10/09 | Bridge Design Supervisor M. ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\87\b34\structures\zbi34misc2.dgn | zbi34misc2 |
| Bridge Sheet No. BRI16 | Sheet 60 of 79 |
| PLOTTED 28-MAY-2003 | |



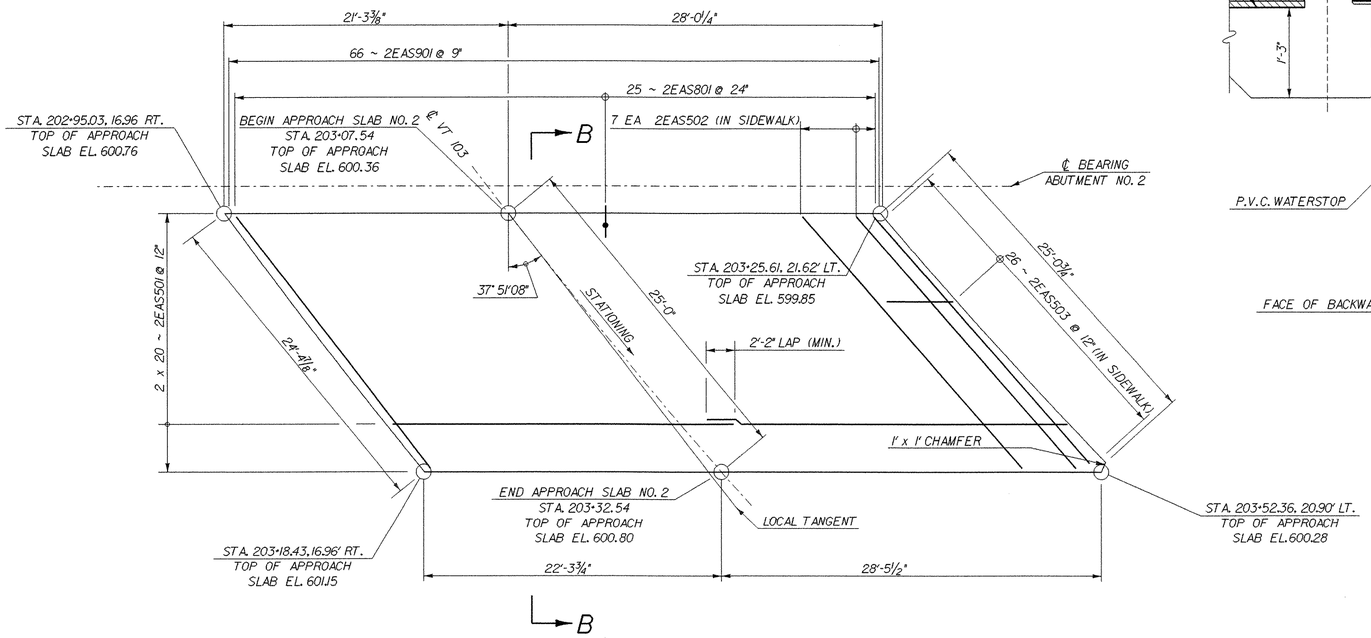

## APPROACH SLAB NO. 1 PLAN

SCALE: 3/16" = 1'-0"



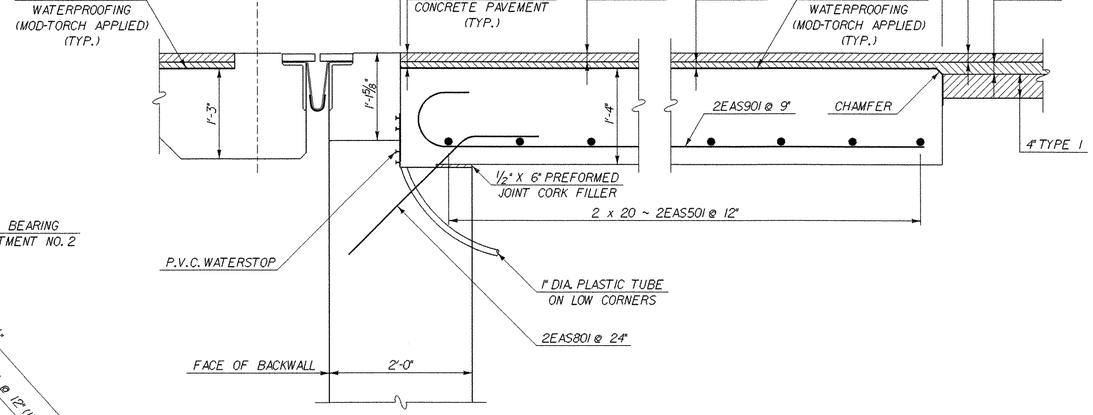

## SECTION A-A

SCALE: 1" = 1'-0"




## APPROACH SLAB NO. 2 PLAN

SCALE: 3/16" = 1'-0"




## SECTION B-B

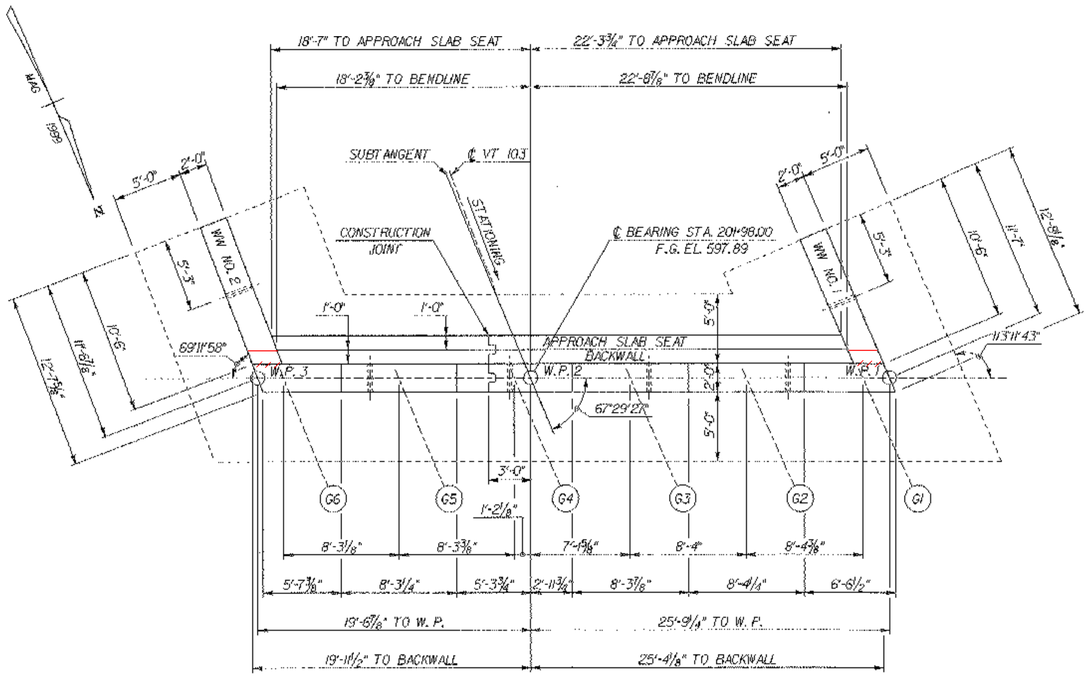
SCALE: 1" = 1'-0"

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

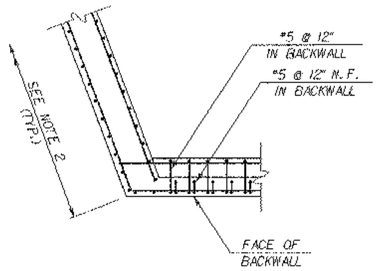
| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |
| VT 103 OVER THE WILLIAMS RIVER | |
| APPROACH SLAB DETAILS | |
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By T.GRANT Date 10/00 | Bridge Design Supervisor M.ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\87bl34\Structures\zbl34cas.dgn | zbl34casJ |
| Bridge Sheet No. BRI17 | Sheet 61 of 79 |

McFARLAND - JOHNSON, INC.

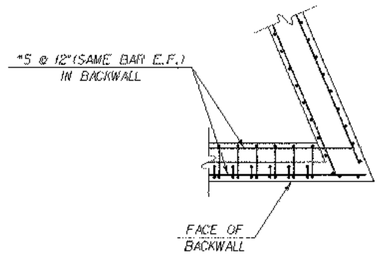
PLOTTED 28-MAY-2003



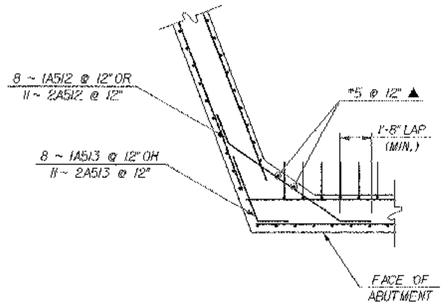

## ABUTMENT NO. 1 PLAN
SCALE: 3/16" = 1'-0"



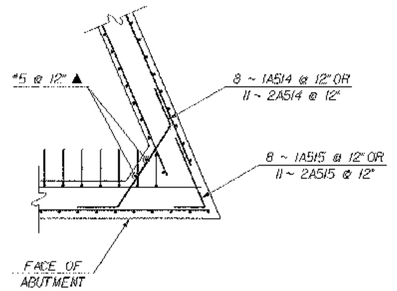

## WINGWALL NO. 2 & 4 CORNER DETAIL @ BACKWALL
SCALE: 1/4" = 1'-0"



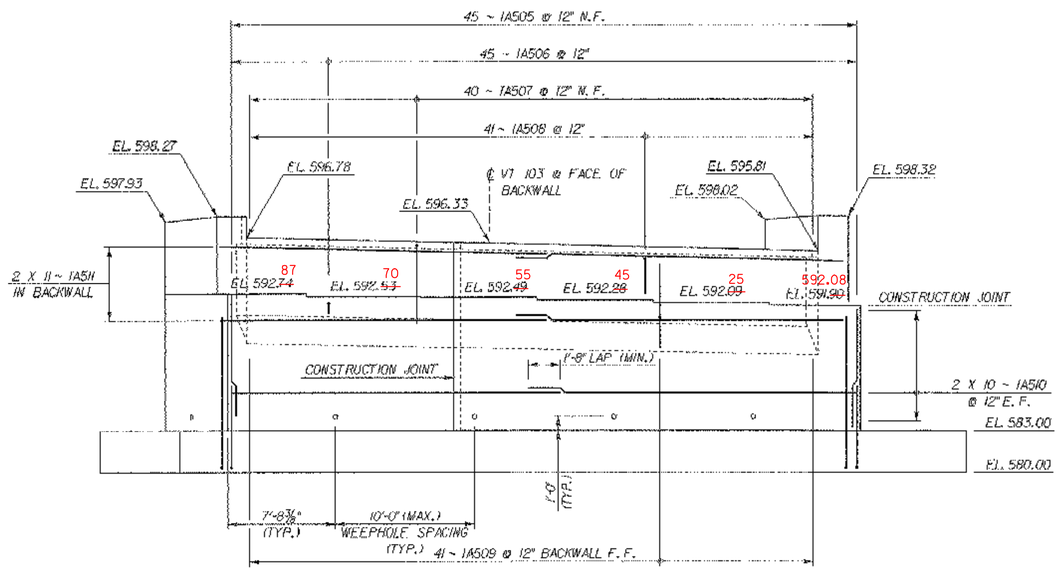

## WINGWALL NO. 1 & 3 CORNER DETAIL @ BACKWALL
SCALE: 1/4" = 1'-0"



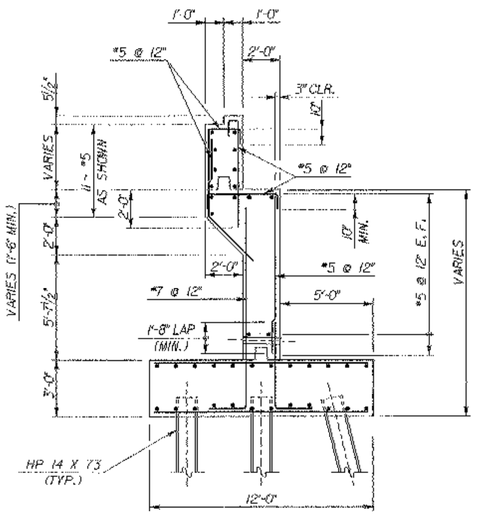

## WINGWALL NO. 2 & 4 CORNER DETAIL @ STEM
SCALE: 1/4" = 1'-0"




## WINGWALL NO. 1 & 3 CORNER DETAIL @ STEM
SCALE: 1/4" = 1'-0"




## ABUTMENT NO. 1 ELEVATION
SCALE: 3/16" = 1'-0"




## ABUTMENT NO. 1 TYPICAL SECTION
SCALE: 1/4" = 1'-0"

## LEGEND

N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE
▲ = CUT TO FIT IN FIELD

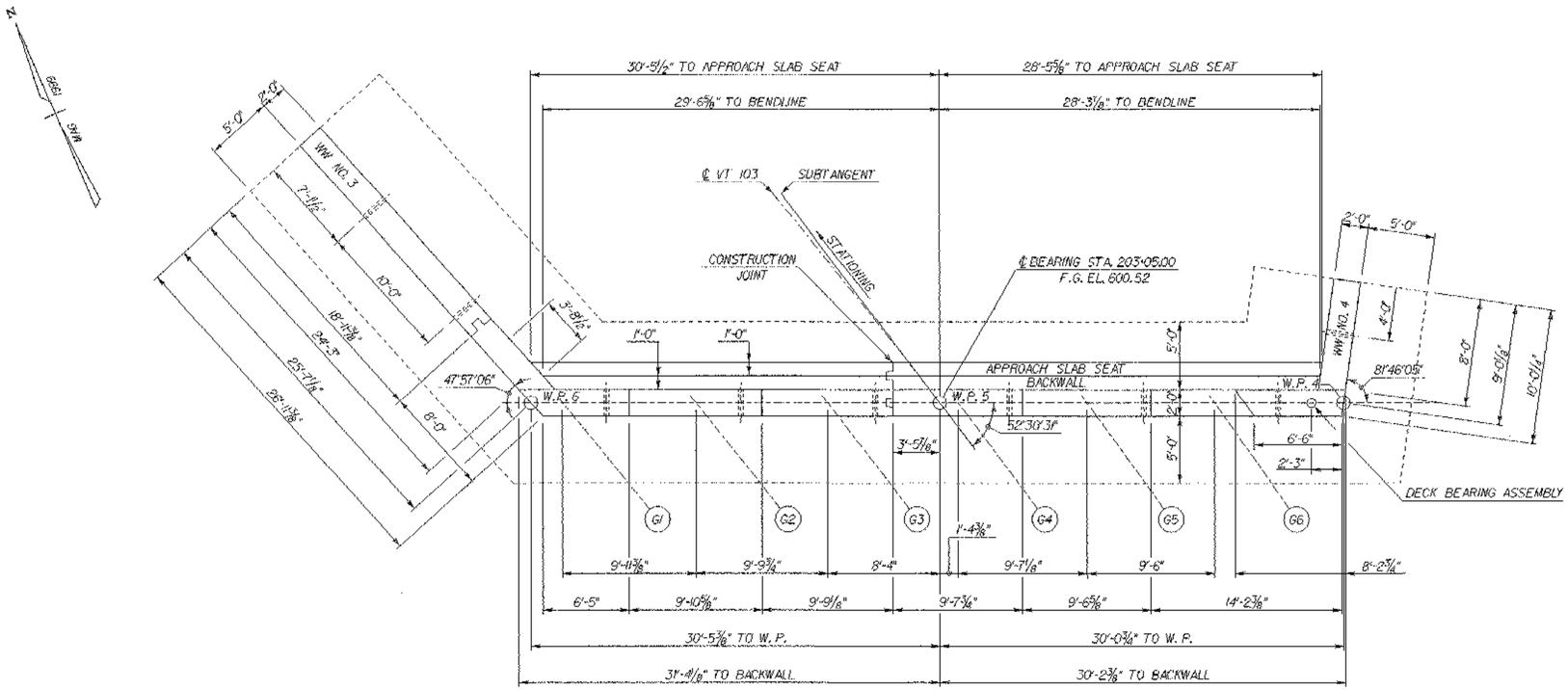
## NOTES

1. FOR FOOTING REINFORCEMENT DETAILS, SEE SHEET 65 of 79.
2. FOR WINGWALL REINFORCEMENT DETAILS, SEE SHEET 64 of 79.

McFARLAND-JOHNSON, INC.

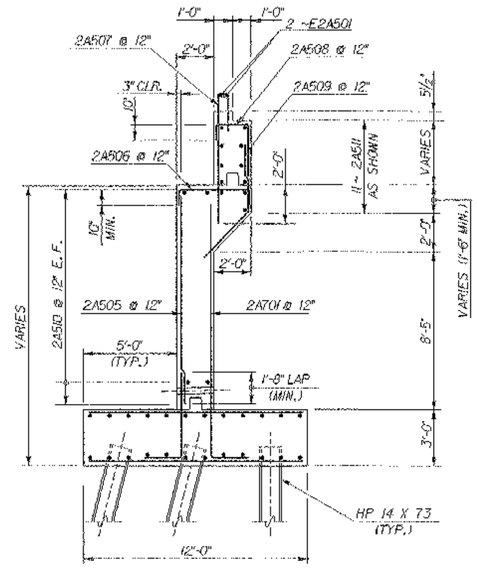
STATE OF VERMONT
AGENCY OF TRANSPORTATION

| | |
|---|---|
| Town of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |
| VT 103 OVER THE WILLIAMS RIVER | |
| ABUTMENT NO. 1 DETAILS | |
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By Y. GRANT Date 10/00 | Bridge Design Supervisor M. ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.C.C. Info. MN87bl34\Structures\zbl34oal.dgn | zbl34oal1 |
| Bridge Sheet No. BR118 | Sheet 62 of 79 |
| PLOTTED 28-MAY-2003 | |



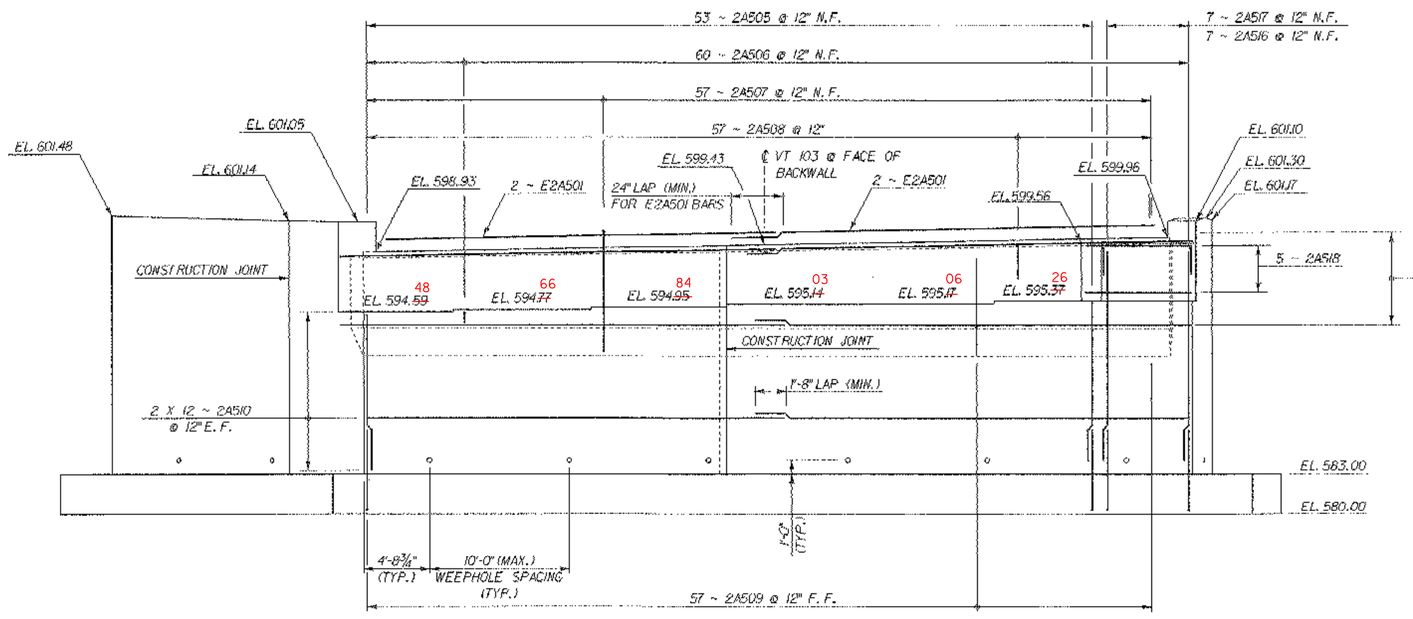

## ABUTMENT NO. 2 MASONRY

SCALE: 3/16" = 1'-0"




## ABUTMENT NO. 2 TYPICAL SECTION

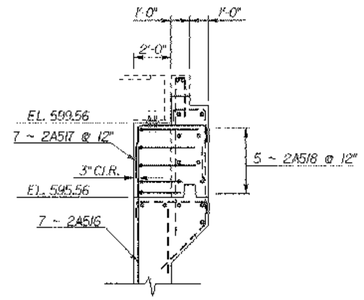
SCALE: 1/8" = 1'-0"




## ABUTMENT NO. 2 REINFORCING

SCALE: 3/16" = 1'-0"

NOTE: LOWER BM SEATS 0.11FT SO AS TO ALLOW FOR HIGHER POT BEARINGS BY COSMEC INC. ABUTMENT #2 ONLY




## ABUTMENT NO. 2 EXTRUDED BACKWALL AT DECK BEARING

SCALE: 1/4" = 1'-0"

## LEGEND

N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE
▲ = CUT TO FIT IN FIELD

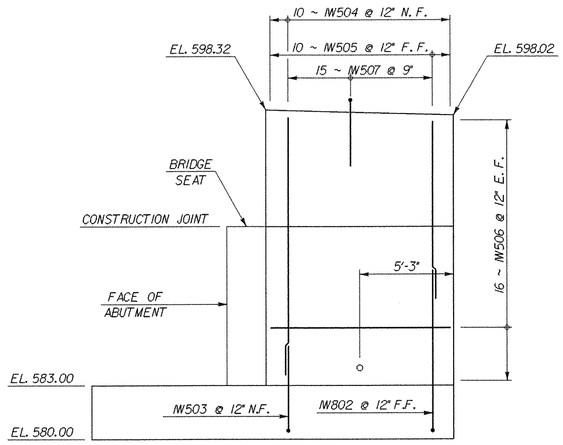
## NOTES

1. FOR FOOTING REINFORCEMENT DETAILS, SEE SHEET 66 of 79.
2. FOR WINGWALL REINFORCEMENT DETAILS, SEE SHEET 64 of 79.

McFARLAND - JOHNSON, INC.

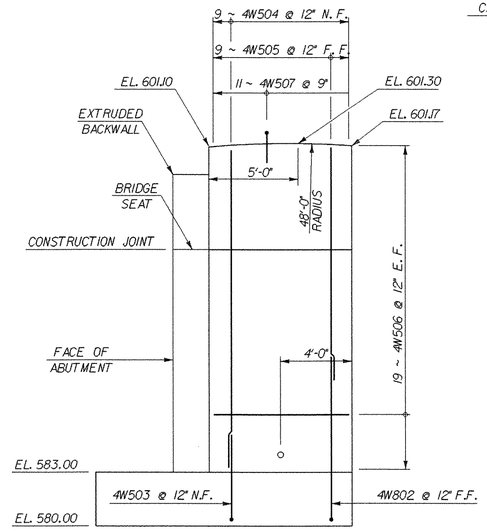
# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Leg Sta. / Surv. Sta. |
| VT 103 OVER THE WILLIAMS RIVER | |
| ABUTMENT NO. 2 DETAILS | |
| Designed By L.WILSON | Drawn By P.DUSTIN |
| Checked By T. GRANT Date 10/08 | Bridge Design Supervisor M. ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.C.C. Info. M:\ST\W34\Structures\zbl34a02.dgn | zbl34a02 |
| Bridge Sheet No. BRII9 | Sheet 63 of 79 |
| PLOTTED 28-MAY-2003 | |



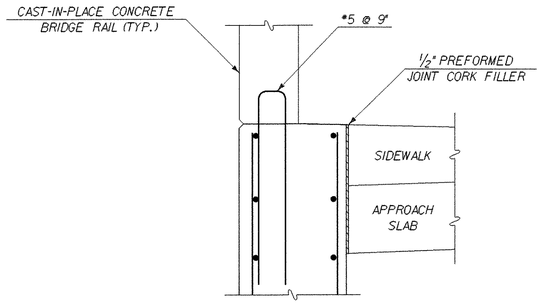

## WINGWALL NO. 1 ELEVATION

SCALE: 1/4" = 1'-0"



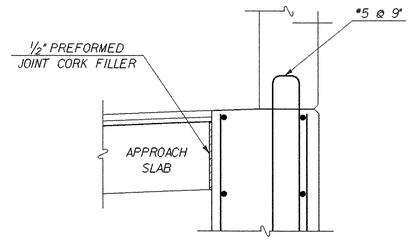

## WINGWALL NO. 4 ELEVATION

SCALE: 1/4" = 1'-0"



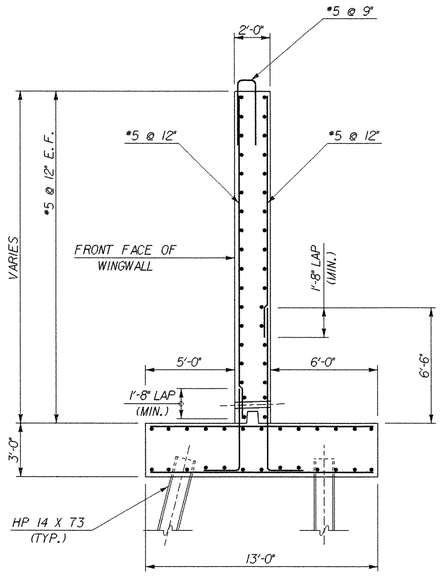

## SIDEWALK AND WINGWALL TYPICAL SECTION

SCALE: 3/4" = 1'-0"



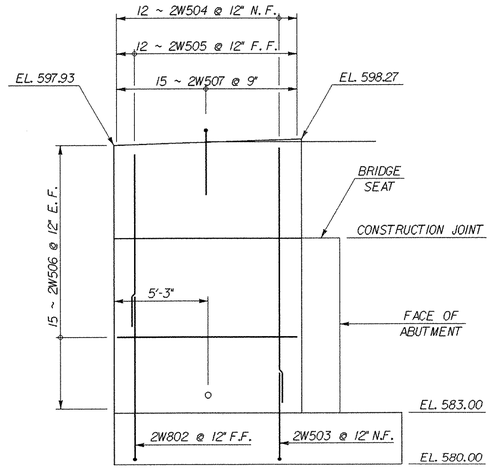

## RAIL AND WINGWALL TYPICAL SECTION

SCALE: 3/4" = 1'-0"



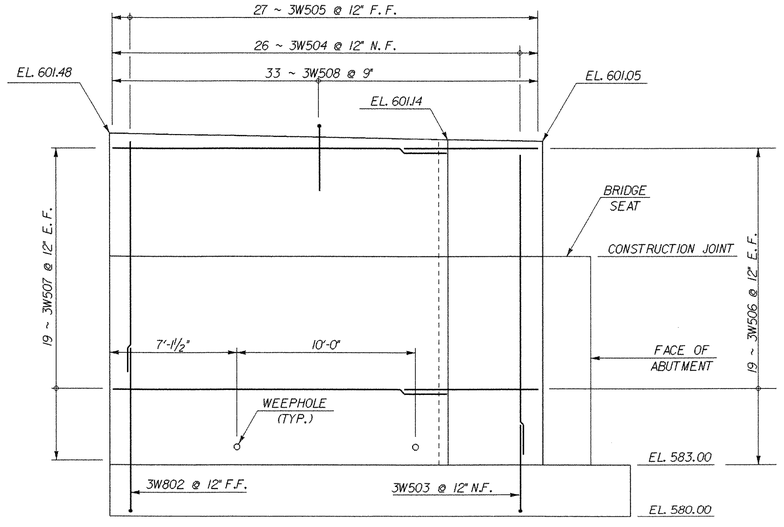

## WINGWALL TYPICAL SECTION

SCALE: 1/4" = 1'-0"




## WINGWALL NO. 2 ELEVATION

SCALE: 1/4" = 1'-0"




## WINGWALL NO. 3 ELEVATION

SCALE: 1/4" = 1'-0"

## NOTES

N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE
▲ = CUT TO FIT IN FIELD

McFARLAND - JOHNSON, INC.

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

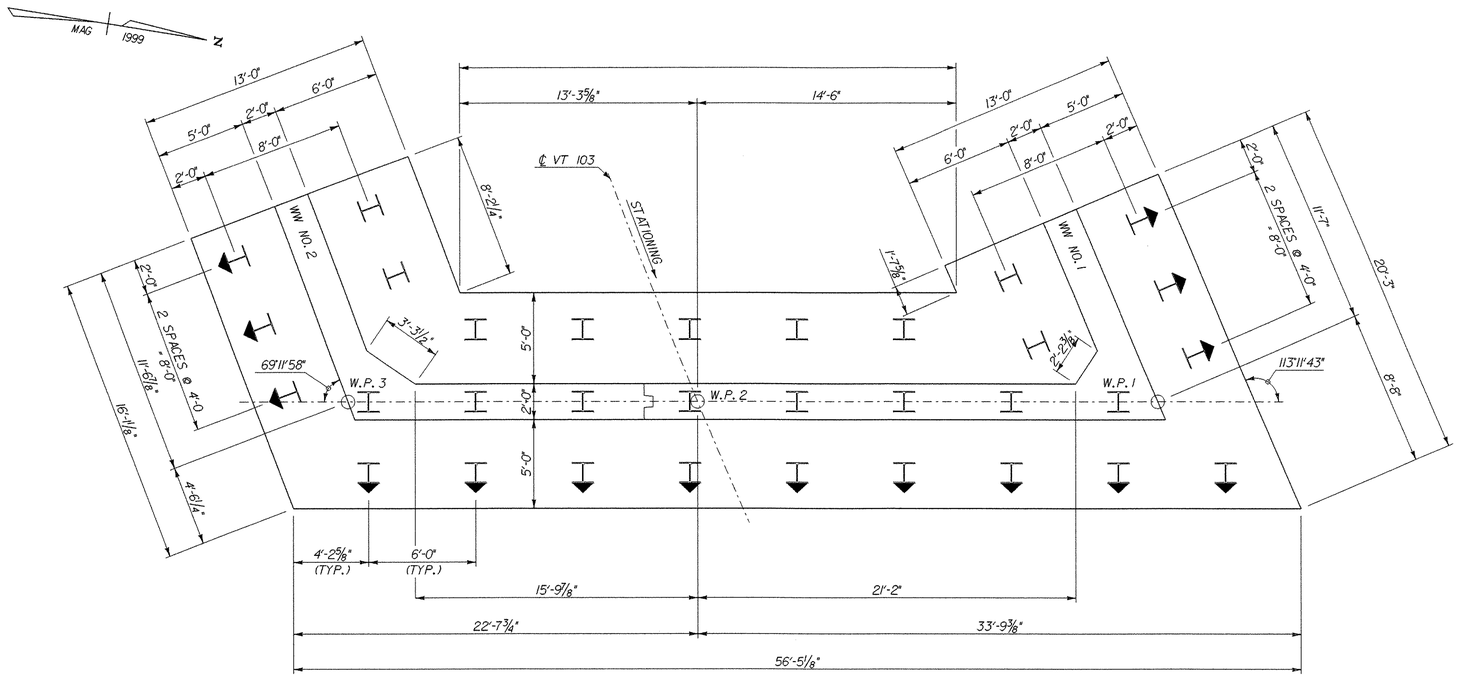
| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |

VT 103 OVER THE WILLIAMS RIVER

WINGWALL DETAILS

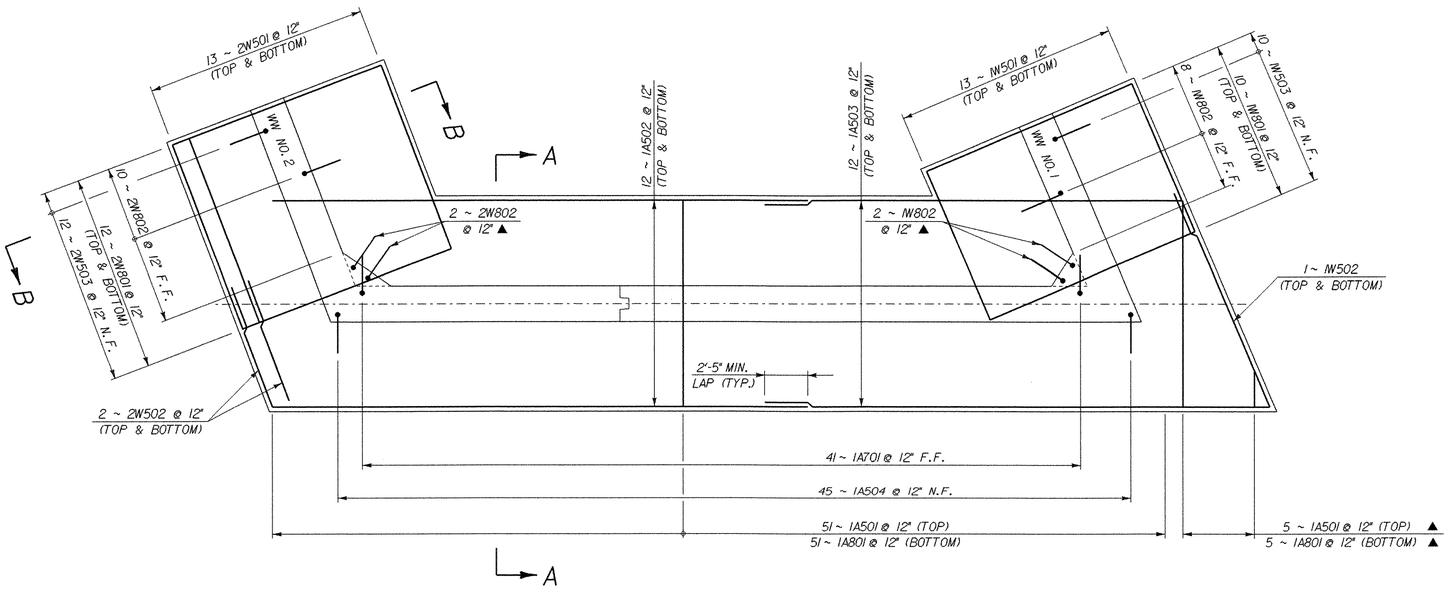
| | |
|---|---|
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By T. GRANT Date 10/00 | Bridge Design Supervisor M. ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\87bl3-A\Structures\zbl34cwd.dgn | zbl34cwdJ |
| Bridge Sheet No. BRI20 | Sheet 64 of 79 |

PLOTTED 28-MAY-2003



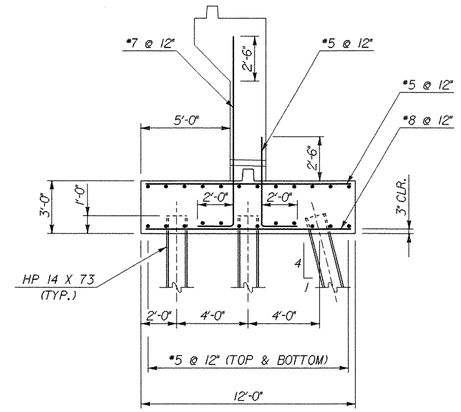

## FOOTING NO. 1 MASONRY

SCALE: 1/4" = 1'-0"



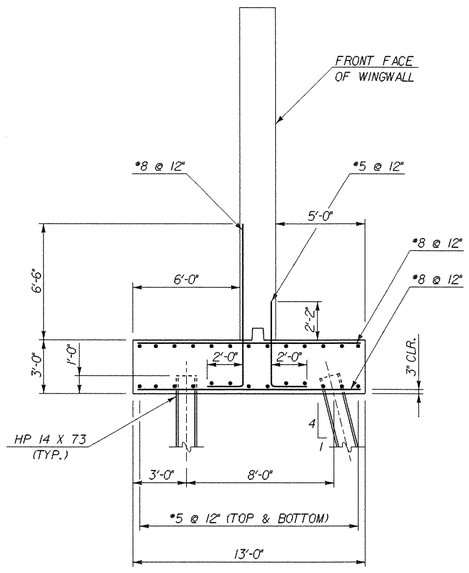

## FOOTING NO. 1 REINFORCING

SCALE: 1/4" = 1'-0"




## SECTION A-A

SCALE: 1/4" = 1'-0"




## SECTION B-B

SCALE: 1/4" = 1'-0"

## NOTES

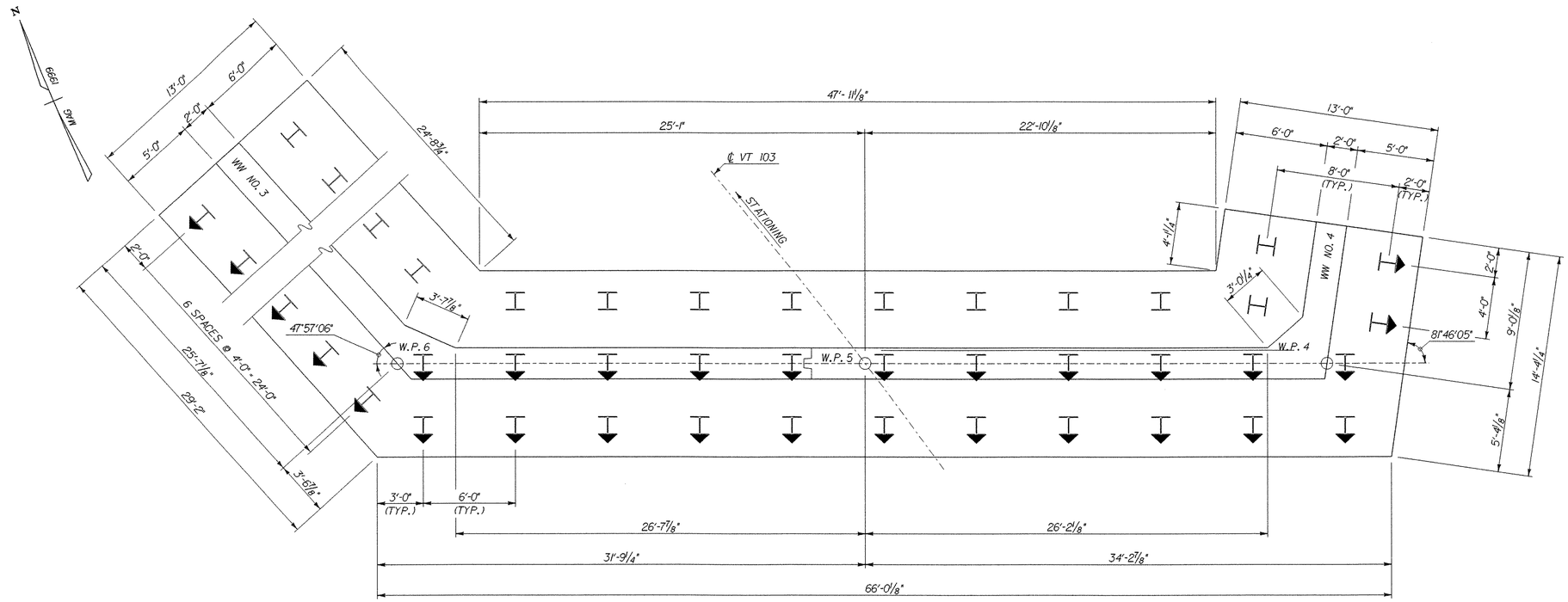
N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE
▲ = CUT TO FIT IN FIELD

McFARLAND - JOHNSON, INC.

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

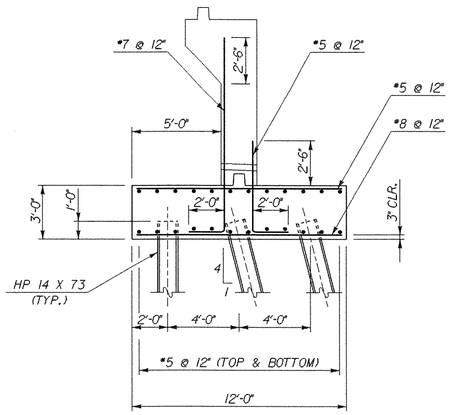
| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |
| VT 103 OVER THE WILLIAMS RIVER | |
| FOOTING NO. 1 DETAILS | |
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By T.GRANT Date 10/00 | Bridge Design Supervisor M.ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\87bi34\Structures\zbi34cf1.dgn | zbi34cf1 |
| Bridge Sheet No. BRI21 | Sheet 65 of 79 |

PLOTTED 28-MAY-2003



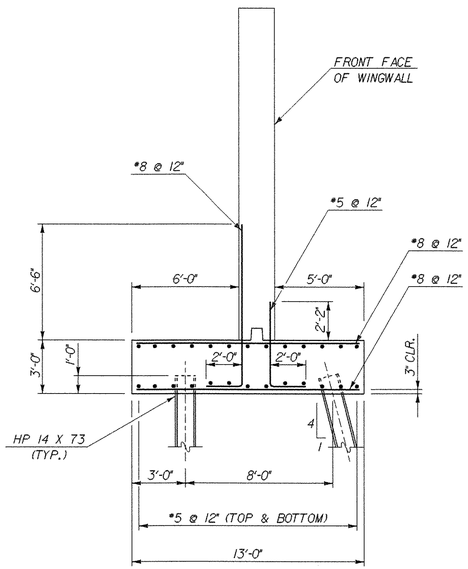

## FOOTING NO. 2 MASONRY

SCALE: 1/4" = 1'-0"



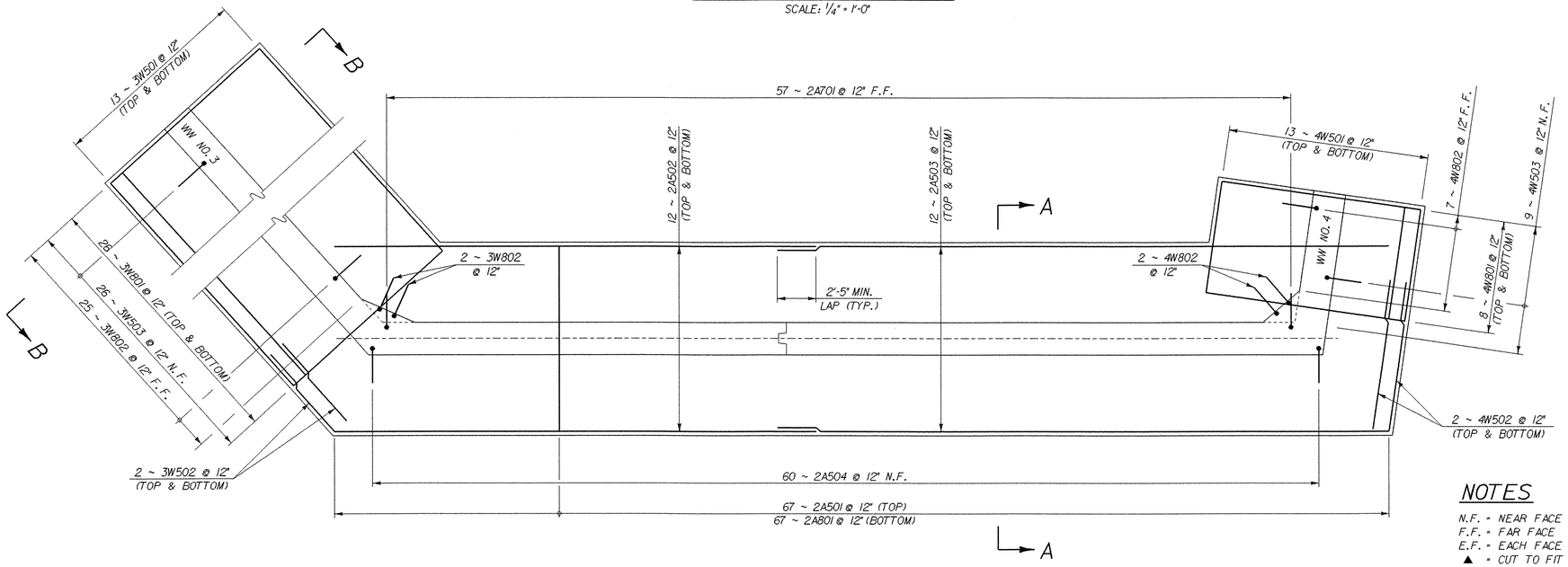

## SECTION A-A

SCALE: 1/4" = 1'-0"




## SECTION B-B

SCALE: 1/4" = 1'-0"




## FOOTING NO. 2 REINFORCING

SCALE: 1/4" = 1'-0"

## NOTES

N.F. = NEAR FACE
F.F. = FAR FACE
E.F. = EACH FACE
▲ = CUT TO FIT IN FIELD

McFARLAND - JOHNSON, INC.

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |
| VT 103 OVER THE WILLIAMS RIVER | |
| FOOTING NO. 2 DETAILS | |
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By T. GRANT — Date 10/00 | Bridge Design Supervisor M. ZYDEL — Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\87bl34\Structures\zbl34cf2.dgn | zbl34cf2J |
| Bridge Sheet No. BR122 | Sheet 66 of 79 |

PLOTTED 28-MAY-2003

## DECK

| ITEM | NO. PIECES | SIZE | LENGTH | MARK | TYPE | A | B | C | D | E | F | G | H | J | K | R | O |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 273 | 5 | 39-0 | ES501 | STR | | | | | | | | | | | | |
| 5 | 96 | 5 | 10-8 | ES502 | S6 | 0-10 | 1-7 | 6-2 | 1-3 | | | 0-10 | | | | | |
| 6 ▲ | 10 | 5 | 17-0 | ES503 | STR | | | | | | | | | | | | |
| 7 | 4 | 5 | 26-8 | ES504 | STR | | | | | | | | | | | | |
| 8 ✳ | 36 | 5 | 8-4 | ES505 | 16 | 3-9 | 0-11 | 2-8 | 1-0 | | | | 0-0 | | 0-0 | | |
| 9 ▲ | 10 | 5 | 32-0 | ES506 | STR | | | | | | | | | | | | |
| 10 | 35 | 5 | 5-10 | ES507 | 16 | 2-6 | 0-11 | 1-5 | 1-0 | | | | 0-0 | | 0-0 | | |
| 11 ✳ | 613 | 6 | 26-8 | ES601 | STR | | | | | | | | | | | | |
| 12 | 148 | 6 | 32-0 | ES602 | STR | | | | | | | | | | | | |

## APPROACH SLAB NO. 1

| ITEM | NO. PIECES | SIZE | LENGTH | MARK | TYPE | A | B | C | D | E | F | G | H | J | K | R | O |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | 38 | 5 | 21-4 | 1EAS501 | STR | | | | | | | | | | | | |
| 18 ✳ | 8 | 5 | 19-8 | 1EAS502 | STR | | | | | | | | | | | | |
| 19 | 19 | 5 | 9-11 | 1EAS503 | S6 | 0-10 | 1-8 | 4-7 | 2-0 | | | 0-10 | | | | | |
| 20 | 21 | 8 | 4-0 | 1EAS801 | 16 | 0-0 | 0-0 | 1-0 | 3-0 | | | | 2-1½ | | 2-1½ | | |
| 21 | 46 | 9 | 19-10 | 1EAS901 | 1 | 0-4 | 19-6 | | | | | 0-0 | | 0-9 | | | |

## APPROACH SLAB NO. 2

| ITEM | NO. PIECES | SIZE | LENGTH | MARK | TYPE | A | B | C | D | E | F | G | H | J | K | R | O |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 40 | 5 | 26-10 | 2EAS501 | STR | | | | | | | | | | | | |
| 27 | 7 | 5 | 24-10 | 2EAS502 | STR | | | | | | | | | | | | |
| 28 | 26 | 5 | 11-2 | 2EAS503 | S6 | 0-10 | 1-9 | 5-8 | 2-1 | | | 0-10 | | | | | |
| 29 ✳ | 26 | 8 | 4-0 | 2EAS801 | 16 | 0-0 | 0-0 | 1-0 | 3-0 | | | | 2-1½ | | 2-1½ | | |
| 30 ✳ | 67 | 9 | 24-9 | 2EAS901 | 1 | 0-4 | 23-8 | | | | | 0-0 | | 0-9 | | | |

## ABUTMENT NO. 1

| ITEM | NO. PIECES | SIZE | LENGTH | MARK | TYPE | A | B | C | D | E | F | G | H | J | K | R | O |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 | 56 | 5 | 11-6 | 1A501 | STR | | | | | | | | | | | | |
| 36 | 24 | 5 | 33-0 | 1A502 | STR | | | | | | | | | | | | |
| 37 | 24 | 5 | 25-4 | 1A503 | STR | | | | | | | | | | | | |
| 38 ✳ | 46 | 5 | 7-3 | 1A504 | 17 | | 5-8 | 2-0 | 0-0 | | | | | | | | |
| 39 | 45 | 5 | 8-4 | 1A505 | STR | | | | | | | | | | | | |
| 40 | 45 | 5 | 5-2 | 1A506 | 17 | | 0-10 | 3-6 | 0-10 | | | | | | | | |
| 41 | 40 | 5 | 7-4 | 1A507 | 17 | | 0-10 | 0-7 | 5-11 | | | | | | | | |
| 42 | 41 | 5 | 5-6 | 1A508 | 17 | | 3-2 | 1-6 | 0-10 | | | | | | | | |
| 43 | 41 | 5 | 7-4 | 1A509 | 16 | 0-0 | 0-0 | 4-6 | 2-10 | | | | 2-0 | | 2-0 | | |
| 44 | 40 | 5 | 23-6 | 1A510 | STR | | | | | | | | | | | | |
| 45 | 22 | 5 | 23-6 | 1A511 | STR | | | | | | | | | | | | |
| 46 | 8 | 5 | 13-8 | 1A512 | 22 | | 1-8 | 7-4 | 1-8 | | | | 0-11½ | 0-11½ | 1-4½ | 1-4½ | |
| 47 | 8 | 5 | 5-8 | 1A513 | 16 | 0-0 | 0-0 | 1-8 | 4-0 | | | | 1-5 | | 3-9 | | |
| 48 | 8 | 5 | 9-6 | 1A514 | 22 | | 2-2 | 5-2 | 2-2 | | | | 1-9¾ | 1-9¾ | 1-2¼ | 1-2¼ | |
| 49 | 8 | 5 | 5-8 | 1A515 | 16 | 0-0 | 0-0 | 1-8 | 4-0 | | | | 1-7 | | 3-8 | | |
| 50 ✳ | 42 | 7 | 12-11 | 1A701 | 17 | | 10-11 | 2-0 | 0-0 | | | | | | | | |
| 51 | 56 | 8 | 11-6 | 1A801 | STR | | | | | | | | | | | | |

## ABUTMENT NO. 2

| ITEM | NO. PIECES | SIZE | LENGTH | MARK | TYPE | A | B | C | D | E | F | G | H | J | K | R | O |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 56 | 67 | 5 | 11-6 | 2A501 | STR | | | | | | | | | | | | |
| 57 | 24 | 5 | 32-0 | 2A502 | STR | | | | | | | | | | | | |
| 58 | 24 | 5 | 36-0 | 2A503 | STR | | | | | | | | | | | | |
| 59 | 60 | 5 | 7-3 | 2A504 | 17 | | 5-3 | 2-0 | 0-0 | | | | | | | | |
| 60 | 53 | 5 | 11-2 | 2A505 | STR | | | | | | | | | | | | |
| 61 | 60 | 5 | 5-2 | 2A506 | 17 | | 0-10 | 3-6 | 0-10 | | | | | | | | |
| 62 | 57 | 5 | 8-8 | 2A507 | 17 | | 0-10 | 0-7 | 7-2 | | | | | | | | |
| 63 | 57 | 5 | 6-4 | 2A508 | 17 | | 4-0 | 1-6 | 0-10 | | | | | | | | |
| 64 | 57 | 5 | 7-4 | 2A509 | 16 | 0-0 | 0-0 | 4-6 | 2-10 | | | | 2-0 | | 2-0 | | |
| 65 | 48 | 5 | 31-0 | 2A510 | STR | | | | | | | | | | | | |
| 66 | 22 | 5 | 31-6 | 2A511 | STR | | | | | | | | | | | | |
| 67 | 11 | 5 | 14-6 | 2A512 | 22 | | 1-8 | 11-2 | 1-8 | | | | 0-8⅛ | 0-8⅛ | 1-6¼ | 1-6¼ | |
| 68 | 11 | 5 | 5-8 | 2A513 | 16 | 0-0 | 0-0 | 1-8 | 4-0 | | | | 2-8 | | 3-0 | | |
| 69 | 11 | 5 | 11-1 | 2A514 | 22 | | 1-8 | 7-9 | 1-8 | | | | 1-1¼ | 1-1¼ | 1-3⅛ | 1-3⅛ | |
| 70 | 11 | 5 | 5-8 | 2A515 | 16 | 0-0 | 0-0 | 1-8 | 4-0 | | | | 0-7 | | 4-0 | | |
| 71 | 7 | 5 | 16-0 | 2A516 | STR | | | | | | | | | | | | |
| 72 | 7 | 5 | 9-6 | 2A517 | 17 | | 3-0 | 3-6 | 3-0 | | | | | | | | |
| 73 | 5 | 5 | 13-5 | 2A518 | 22 | | 4-0 | 6-0 | 3-5 | | | | 3-3¼ | 3-5½ | 2-3⅝ | 0-6 | |
| 74 ✳ | 58 | 7 | 15-8 | 2A701 | 17 | | 13-8 | 2-0 | 0-0 | | | | | | | | |
| 75 | 67 | 8 | 11-6 | 2A801 | STR | | | | | | | | | | | | |
| 77 ✳ | 5 | 5 | 32-6 | E2A501 | STR | | | | | | | | | | | | |

## WINGWALL NO. 1

| ITEM | NO. PIECES | SIZE | LENGTH | MARK | TYPE | A | B | C | D | E | F | G | H | J | K | R | O |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 82 | 26 | 5 | 10-0 | 1W501 | STR | | | | | | | | | | | | |
| 83 | 2 | 5 | 12-2 | 1W502 | STR | | | | | | | | | | | | |
| 84 | 10 | 5 | 6-11 | 1W503 | 17 | | 4-11 | 2-0 | 0-0 | | | | | | | | |
| 85 | 10 | 5 | 14-7 | 1W504 | STR | | | | | | | | | | | | |
| 86 | 10 | 5 | 10-0 | 1W505 | STR | | | | | | | | | | | | |
| 87 | 32 | 5 | 10-0 | 1W506 | STR | | | | | | | | | | | | |
| 88 | 15 | 5 | 7-8 | 1W507 | 17 | | 3-7 | 0-6 | 3-7 | | | | | | | | |
| 89 | 20 | 8 | 12-6 | 1W801 | STR | | | | | | | | | | | | |
| 90 | 10 | 8 | 11-3 | 1W802 | 17 | | 9-3 | 2-0 | 0-0 | | | | | | | | |

## WINGWALL NO. 2

| ITEM | NO. PIECES | SIZE | LENGTH | MARK | TYPE | A | B | C | D | E | F | G | H | J | K | R | O |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 102 | 26 | 5 | 11-3 | 2W501 | STR | | | | | | | | | | | | |
| 103 | 4 | 5 | 6-9 | 2W502 | STR | | | | | | | | | | | | |
| 104 | 12 | 5 | 6-11 | 2W503 | 17 | | 4-11 | 2-0 | 0-0 | | | | | | | | |
| 105 | 12 | 5 | 14-9 | 2W504 | STR | | | | | | | | | | | | |
| 106 | 12 | 5 | 10-3 | 2W505 | STR | | | | | | | | | | | | |
| 107 | 30 | 5 | 10-0 | 2W506 | STR | | | | | | | | | | | | |
| 108 | 15 | 5 | 7-8 | 2W507 | 17 | | 3-7 | 0-6 | 3-7 | | | | | | | | |
| 109 | 24 | 8 | 12-6 | 2W801 | STR | | | | | | | | | | | | |
| 80 ▲ | 12 | 8 | 11-3 | 2W802 | 17 | | 9-3 | 2-0 | 0-0 | | | | | | | | |

## WINGWALL NO. 3

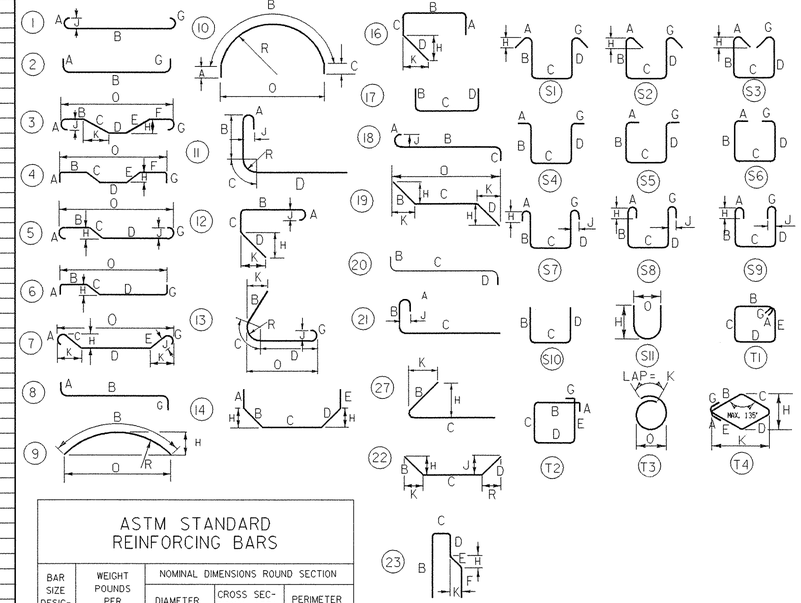
| ITEM | NO. PIECES | SIZE | LENGTH | MARK | TYPE | A | B | C | D | E | F | G | H | J | K | R | O |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 115 | 26 | 5 | 26-0 | 3W501 | STR | | | | | | | | | | | | |
| 116 | 4 | 5 | 5-8 | 3W502 | STR | | | | | | | | | | | | |
| 117 | 26 | 5 | 6-11 | 3W503 | 17 | | 4-11 | 2-0 | 0-0 | | | | | | | | |
| 118 | 26 | 5 | 17-10 | 3W504 | STR | | | | | | | | | | | | |
| 119 | 27 | 5 | 13-5 | 3W505 | STR | | | | | | | | | | | | |
| 120 | 38 | 5 | 8-0 | 3W506 | STR | | | | | | | | | | | | |
| 121 ✳ | 39 | 5 | 18-8 | 3W507 | STR | | | | | | | | | | | | |
| 122 | 33 | 5 | 7-8 | 3W508 | 17 | | 3-7 | 0-6 | 3-7 | | | | | | | | |
| 123 | 52 | 8 | 12-6 | 3W801 | STR | | | | | | | | | | | | |
| 124 | 27 | 8 | 11-3 | 3W802 | 17 | | 9-3 | 2-0 | 0-0 | | | | | | | | |

## WINGWALL NO. 4

| ITEM | NO. PIECES | SIZE | LENGTH | MARK | TYPE | A | B | C | D | E | F | G | H | J | K | R | O |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 131 | 26 | 5 | 8-0 | 4W501 | STR | | | | | | | | | | | | |
| 132 | 4 | 5 | 8-3 | 4W502 | STR | | | | | | | | | | | | |
| 133 | 9 | 5 | 6-11 | 4W503 | 17 | | 4-11 | 2-0 | 0-0 | | | | | | | | |
| 134 | 9 | 5 | 17-11 | 4W504 | STR | | | | | | | | | | | | |
| 135 | 9 | 5 | 13-3 | 4W505 | STR | | | | | | | | | | | | |
| 136 | 38 | 5 | 7-6 | 4W506 | STR | | | | | | | | | | | | |
| 137 | 11 | 5 | 7-8 | 4W507 | 17 | | 3-7 | 0-6 | 3-7 | | | | | | | | |
| 138 | 16 | 8 | 12-6 | 4W801 | STR | | | | | | | | | | | | |
| 139 | 9 | 8 | 11-3 | 4W802 | 17 | | 9-3 | 2-0 | 0-0 | | | | | | | | |

## ~ 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 615-91). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
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 DEGREE AND 135 DEGREE HOOKS.
5. "J" DIMENSION ON 180 DEGREE 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 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.
8. ▲ DENOTES BARS TO BE CUT IN FIELD.
9. ✳ DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
10. △ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
11. "E" IN PREFIX DENOTES EPOXY COATED REINFORCING STEEL.



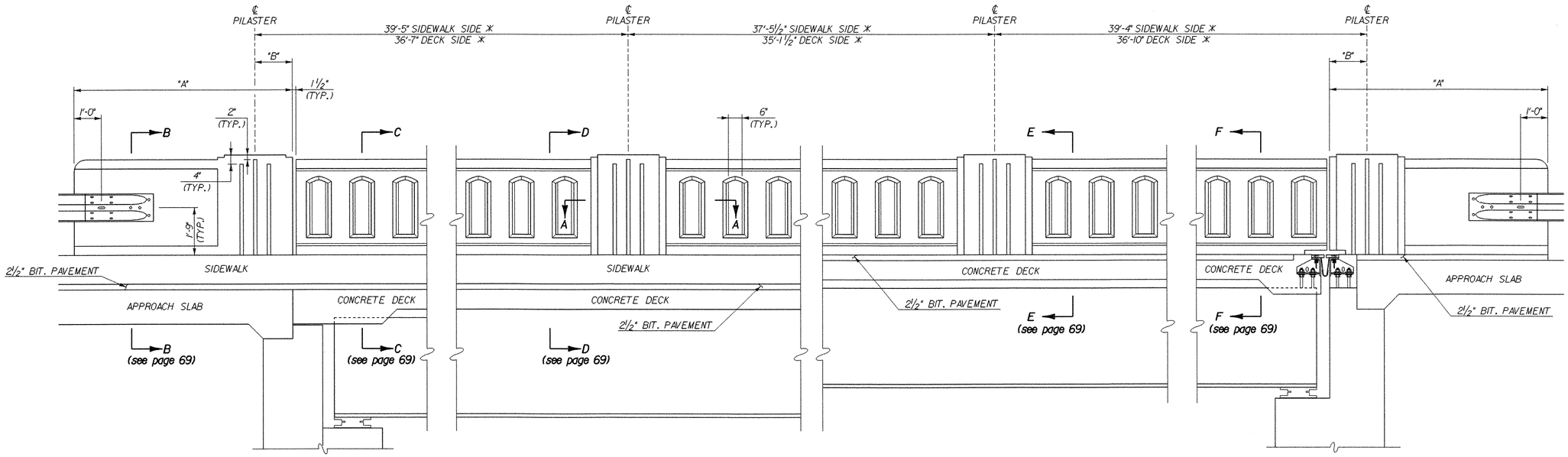

### ASTM STANDARD REINFORCING BARS

| 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 |

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| Town Of CHESTER | Bridge No. 11 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |
| VT 103 OVER THE WILLIAMS RIVER | |
| REINFORCING STEEL SCHEDULE | |
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By T. GRANT Date 10/00 | Bridge Design Supervisor Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C. Info. M:\87bl34\Structures\zbl34crs.dgn | zbl34crsJ |
| Bridge Sheet No. BRI23 | Sheet 67 of 79 |

PLOTTED 28-MAY-2003

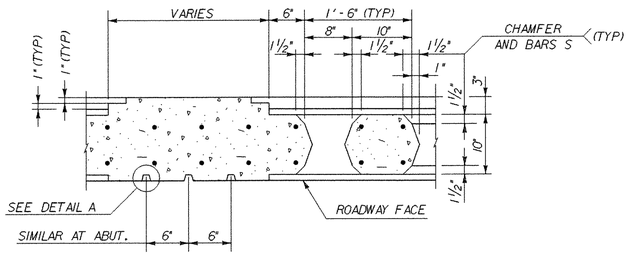



ON SIDEWALK — ON SIDEWALK SIDE AT APPROX. THIRD POINTS — ON DECK AT APPROX. THIRD POINTS — ON DECK

## RAIL ELEVATION

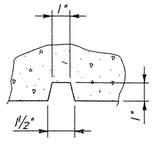
SCALE: 1/2" = 1'-0

( * = MEASURED ALONG OUTSIDE FACE OF RAIL)



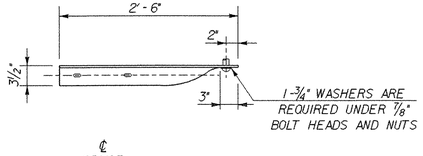

## SECTION A-A

NOT TO SCALE




## DETAIL A

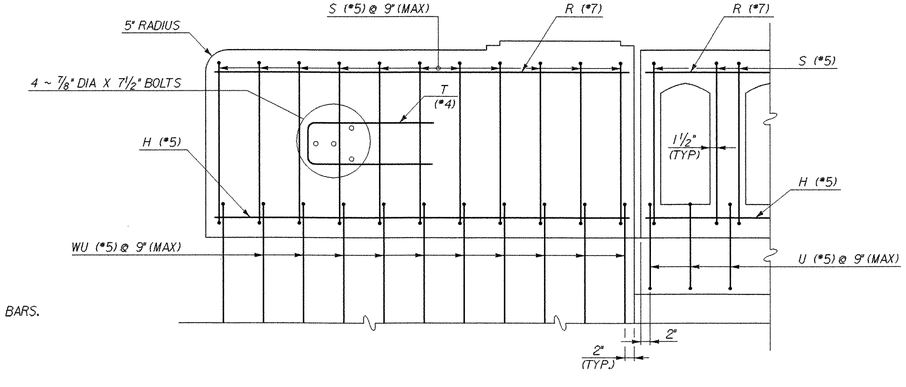
NOT TO SCALE




## WINGWALL PILASTER TABLE

| W.W. NO. | "A" DIST. | "B" DIST. |
|---|---|---|
| W.W. 1 | 9'-3" | 1'-10 1/2" |
| W.W. 2 | 9'-3" | 1'-4 1/2" |
| W.W. 3 | 24'-4" | 1'-4 1/2" |
| W.W. 4 | 7'-8" | 1'-4 1/2" |

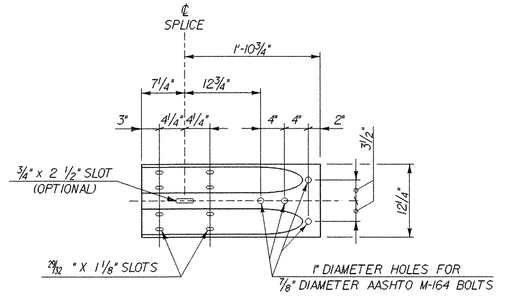
( * = MEASURED ALONG OUTSIDE FACE OF RAIL)




## TYPICAL REINFORCING PLACEMENT

SCALE: 3/4" = 1'-0

(ON WINGWALL WITHOUT SIDEWALK)




## TERMINAL CONNECTOR

SCALE: 1" = 1'-0

TERMINAL CONNECTOR SHALL RECEIVE THE SAME PROTECTIVE COATING AS THE ATTACHED METAL BEAM GUARD RAIL.

## RAIL NOTES

1. ALL PARTS OF THE RAILING INCLUDING REINFORCING, TERMINAL CONNECTOR, BOLTS, NUTS, AND WASHERS ARE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF RAIL.
2. ALL CONCRETE FOR RAILING WALL SHALL BE CONCRETE. HIGH PERFORMANCE CLASS AA.
3. DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTERS OF BARS.
4. SHOP DRAWINGS SHALL BE SUBMITTED FOR THIS RAIL.
5. SEE PLAN AND ELEVATION. BRIDGE SHEET BRI06 FOR PAY LIMIT DIMENSIONS.
6. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
7. SECTIONS B-B TO F-F ON SHEET 69 of 79.

McFARLAND - JOHNSON, INC.

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |

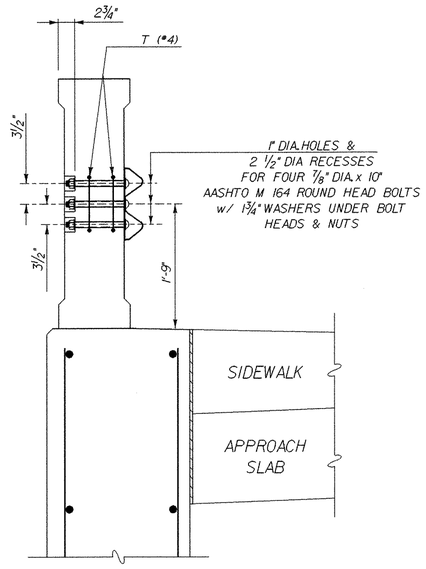
VT 103 OVER THE WILLIAMS RIVER

CAST-IN-PLACE CONCRETE BRIDGE RAILING

| | |
|---|---|
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By T. GRANT Date 10/00 | Bridge Design Supervisor M. ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |

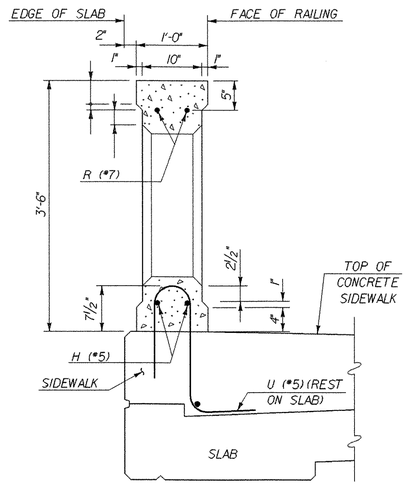
I.G.C. \\vtdot.cadd\Villingcabinet$\87bl34\Structures\zbl34ctl.dgn zbl34ctlJ

Bridge Sheet No. BRI24 Sheet 68 of 79



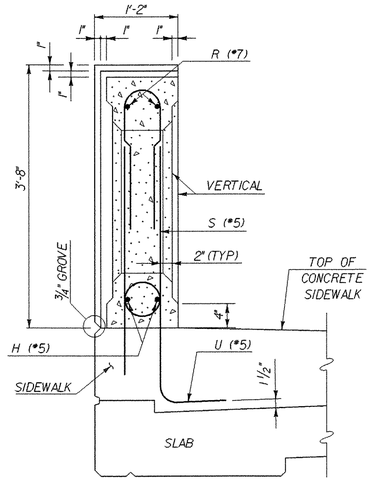

## SECTION B-B

SCALE: 1" = 1'-0"
(SHOWING MBGF CONNECTION)



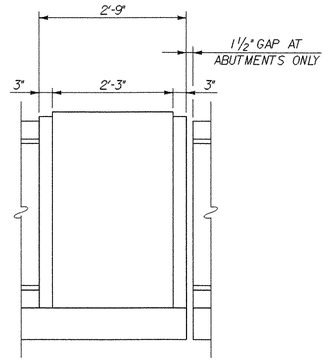

## SECTION C-C

SCALE: 1" = 1'-0"



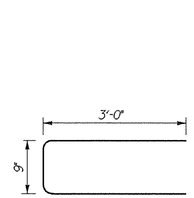

## SECTION D-D

SCALE: 1" = 1'-0"
(SHOWING PILASTER)

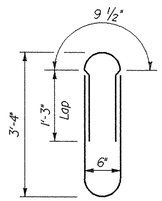



## EXTERIOR PILASTER ELEVATION

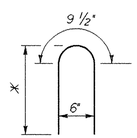
SCALE: ¾" = 1'-0"
(LOCATED AT ABUTMENTS AND 1/3 POINTS ON DECK)



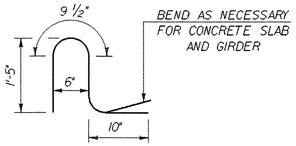

BARS T (#4)
(2 at each Terminal)




BARS S (#5)



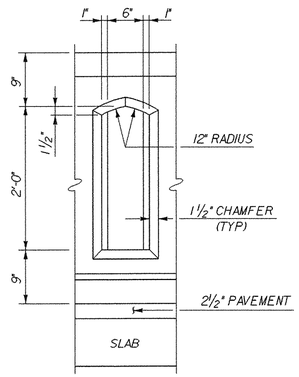

BARS WU (#5)




BARS U (#5)

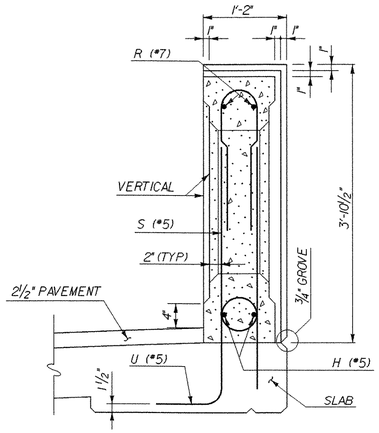
## REINFORCING BAR DETAILS

NOT TO SCALE
(X 1'-10" ON DECK, 2'-7" ON SIDEWALK)



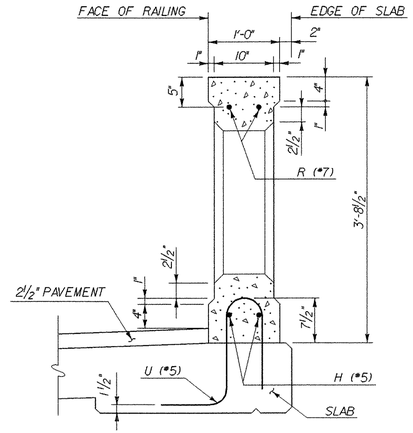

## WINDOW DETAIL

SCALE: 1" = 1'-0"




## SECTION E-E

SCALE: 1" = 1'-0"
(SHOWING PILASTER)




## SECTION F-F

SCALE: 1" = 1'-0"

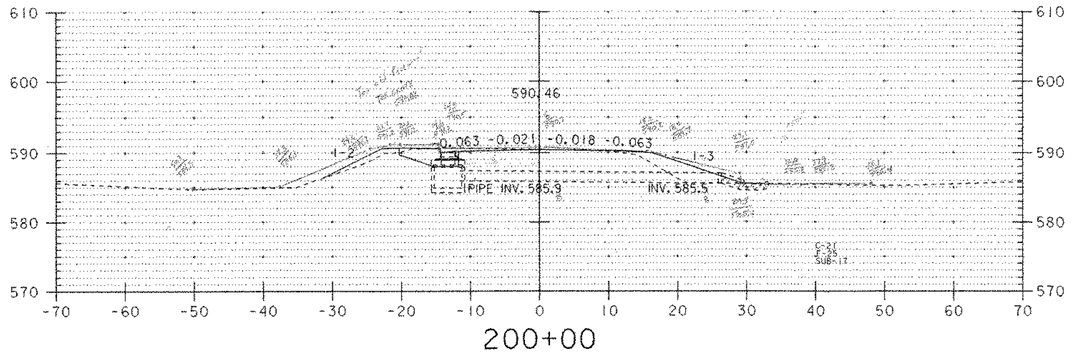
MCFARLAND - JOHNSON, INC.

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| Town Of CHESTER | Bridge No. 12 |
| Highway No. VT 103 | Log Sta. / Surv. Sta. |
| VT 103 OVER THE WILLIAMS RIVER | |
| CAST-IN-PLACE CONCRETE BRIDGE RAILING | |
| Designed By L.WIXSON | Drawn By P.DUSTIN |
| Checked By T.GRANT Date 10/00 | Bridge Design Supervisor M.ZYDEL Date |
| PROJECT CHESTER | PROJECT NO. BRF 025-1(35) |
| I.G.C.\\vdot...cadd\Villngcabinets\87bl34\Structures\zbl34ct2.dgn | zbl34ct2j |
| Bridge Sheet No. BRI25 | Sheet 69 of 79 |

# VT 103

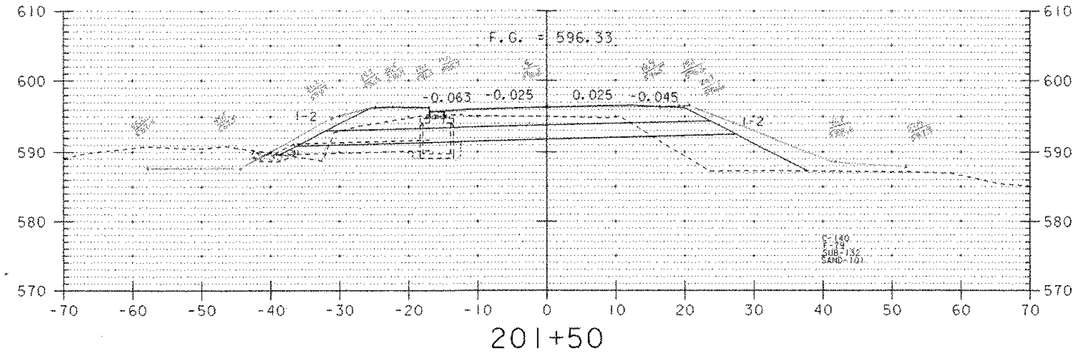
200+00.00 LT NEW DI



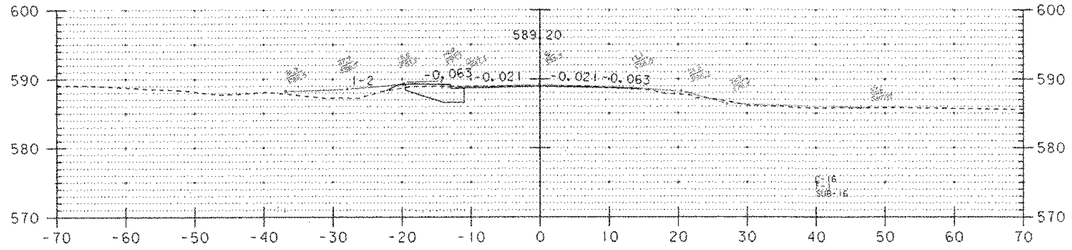

200+00

201+95.84 STOP ROADWAY/BEGIN BRIDGE

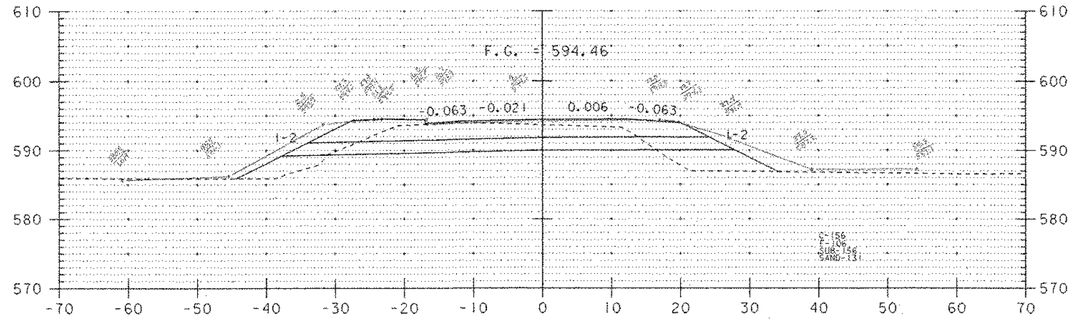
201+75.00 LT NEW DI




201+50



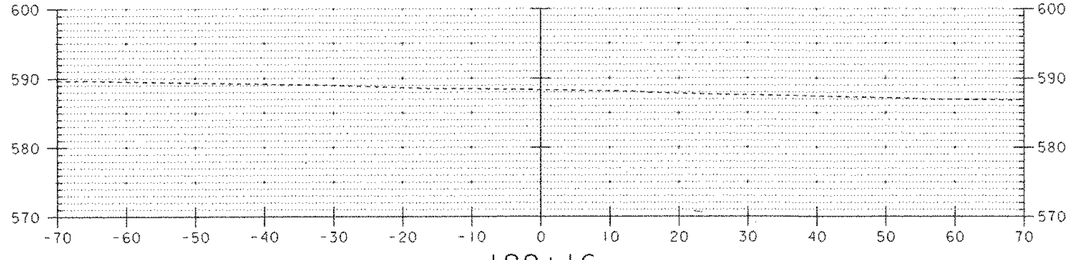

199+50



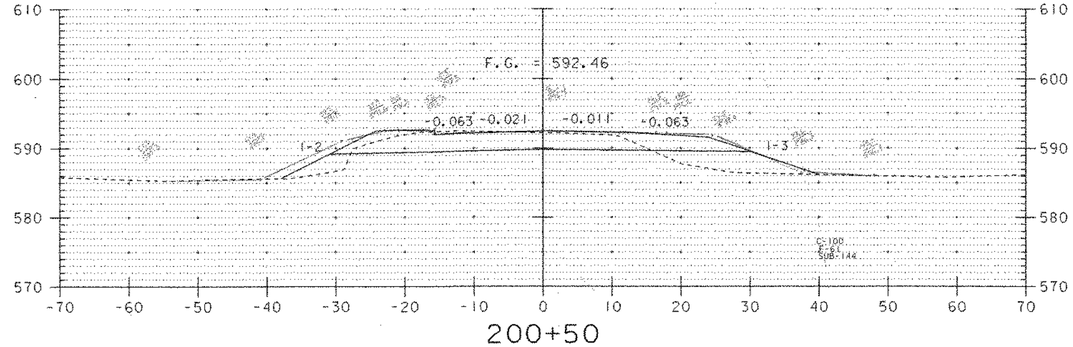

201+00

201+00 END APPROACH/BEGIN PROJECT/BEGIN ROADWAY

199+50 BEGIN APPROACH



199+16



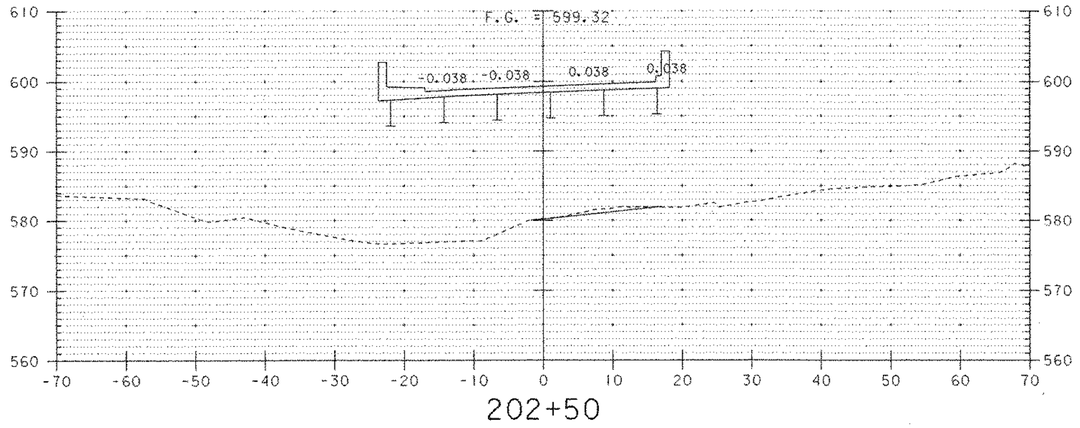

200+50

1"=10'
1"=10'
SCALE

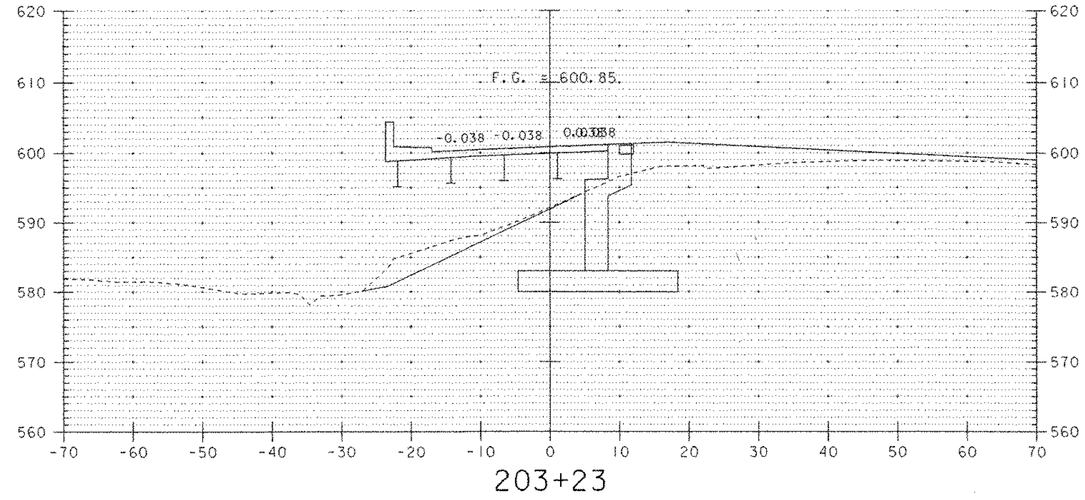
**DATUM**
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

| | |
|---|---|
| PROJECT: CHESTER | PROJECT NO.: BRF 025-1(35) |
| DESIGN FILE NAME: M:\ 154901\VAOT Chester Curv\HWY\DRAW\zf134xs5.dgn | |
| IPARM FILE NAME: zf134xsl.i | PLOT DATE: 28-MAY-2003 |
| SURVEYED BY: SHERIDAN | SURVEY DATE: 8/90 |
| SQUAD LEADER: PORTALUPI | DRAWN BY: L. BULLOCK |
| VT 103 SECTIONS | SHEET: 70 OF 79 |

# VT 103

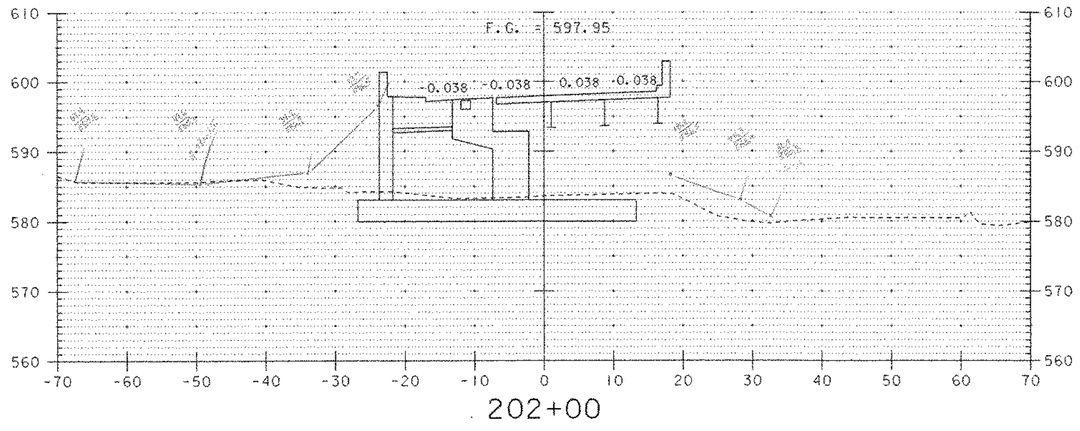



202+50

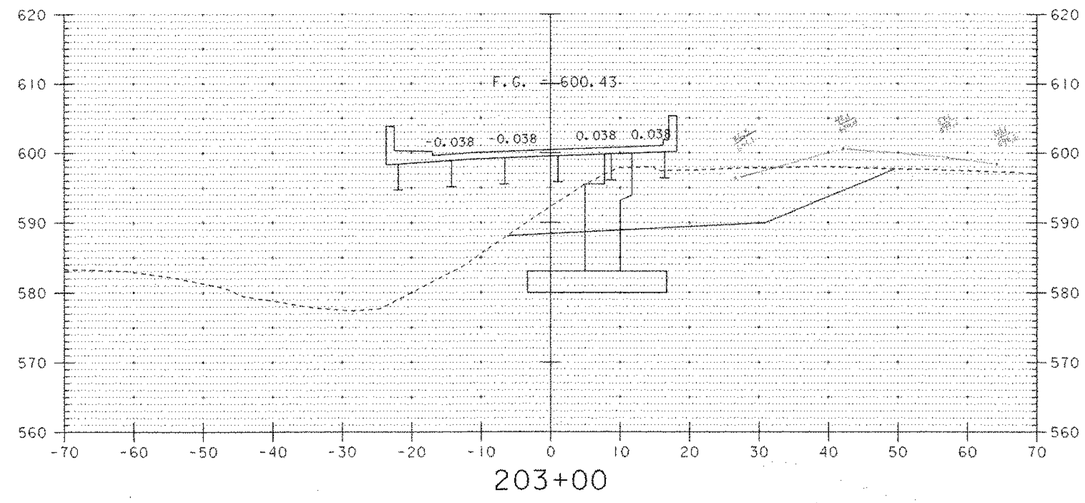



203+23

203+05.87 END BRIDGE/BEGIN ROADWAY



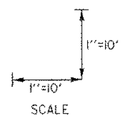

202+00




203+00

**DATUM**

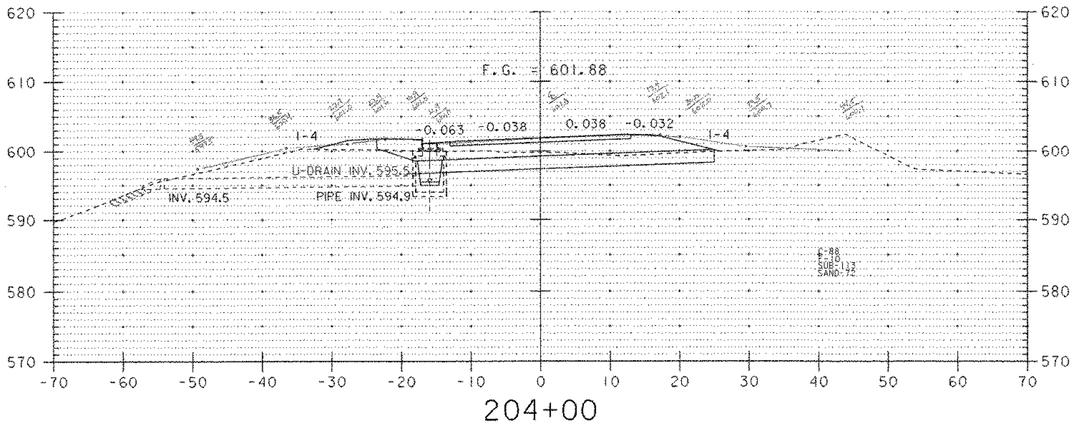
| | |
|---|---|
| VERTICAL | NGVD 1929 |
| HORIZONTAL | NAD 1927 |




SCALE

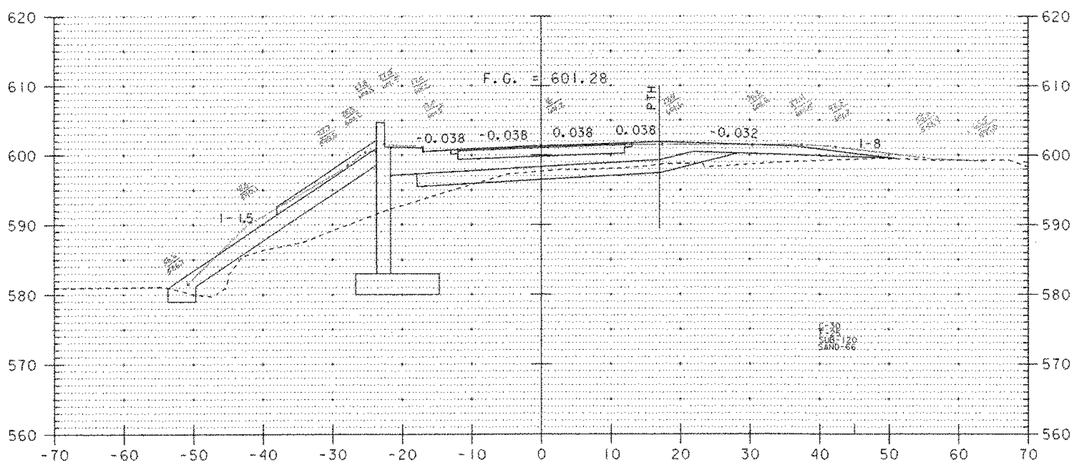
| | |
|---|---|
| PROJECT: CHESTER | PROJECT NO.: BRF 025-1(35) |
| DESIGN FILE NAME: M:\ 154901\VAOT Chester Curv\HWY\DRAW\zf134xs5.dgn | |
| IPARM FILE NAME: zf134xs2.I | PLOT DATE: 28-MAY-2003 |
| SURVEYED BY: SHERIDAN | SURVEY DATE: 8/90 |
| SQUAD LEADER: PORTALUPI | DRAWN BY: L. BULLOCK |
| VT 103 SECTIONS | SHEET: 71 OF 79 |

# VT 103



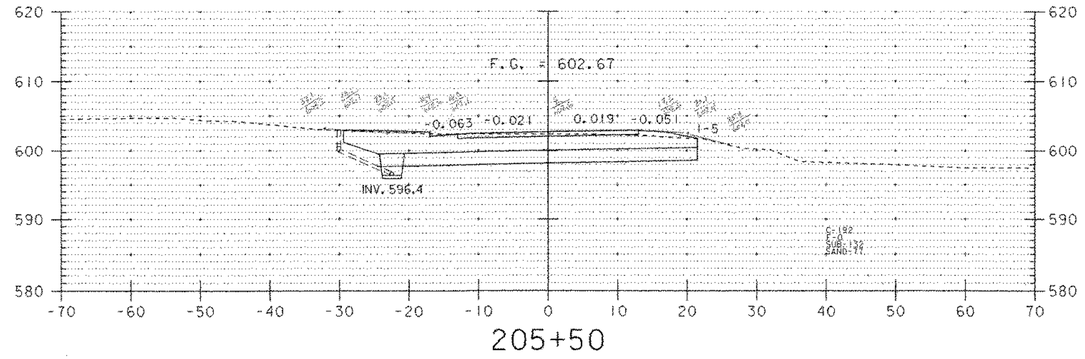

204+00

203+75 LT NEW DI (OUTLET U/D RUN INTO DI)

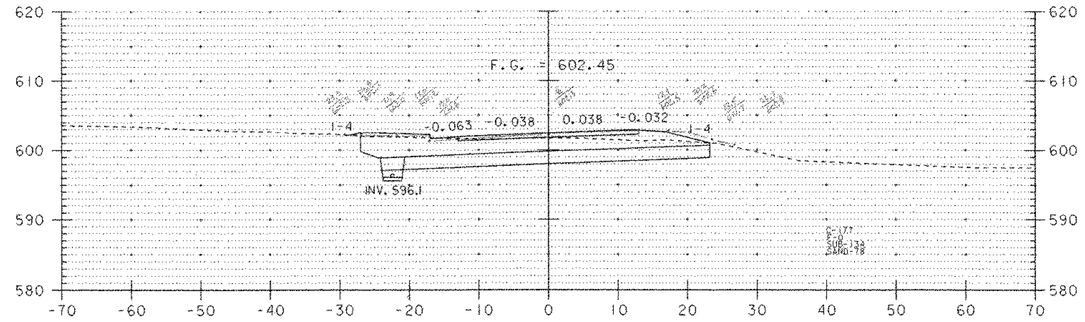



203+50

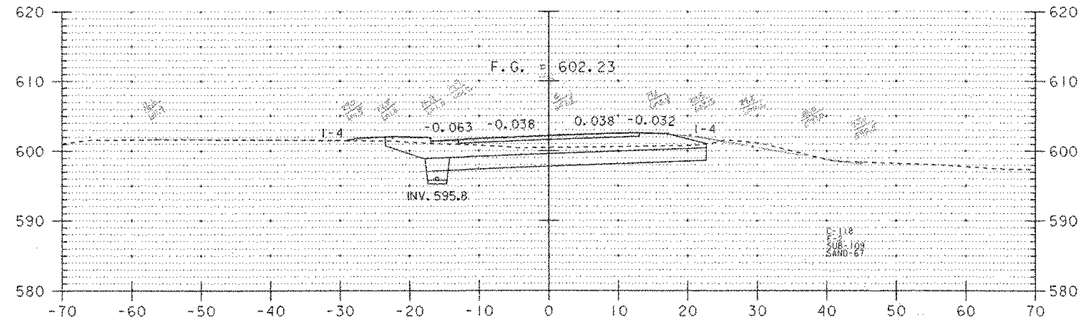
205+50 END ROADWAY/END PROJECT/BEGIN APPROACH




205+50




205+00




204+50

**DATUM**

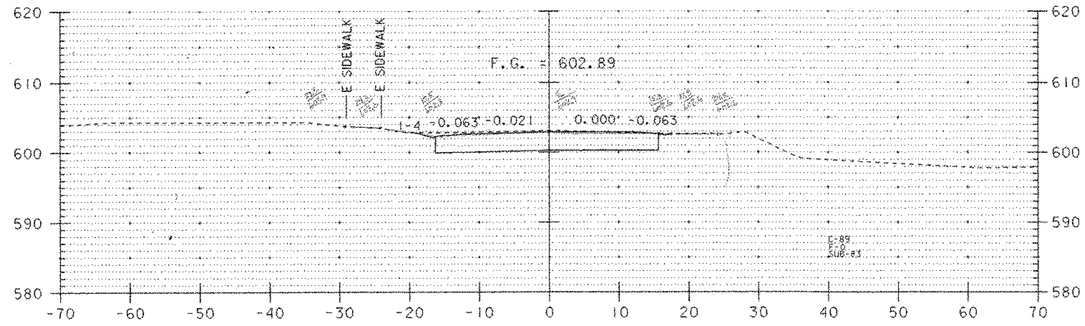
| | |
|---|---|
| VERTICAL | NGVD 1929 |
| HORIZONTAL | NAD 1927 |

1"=10'
1"=10'
SCALE

| PROJECT: | PROJECT NO.: |
|---|---|
| CHESTER | BRF 025-1(35) |

| | | | |
|---|---|---|---|
| DESIGN FILE NAME: M:\ 15491O1VAOT Chester Curv\HWY\DRAW\zf134xs5.dgn | | | |
| IPARM FILE NAME: | zf134xs3.i | PLOT DATE: | 28-MAY-2003 |
| SURVEYED BY: | SHERIDAN | SURVEY DATE: | 8/90 |
| SQUAD LEADER: | PORTALUPI | DRAWN BY: | L. BULLOCK |
| VT 103 SECTIONS | | SHEET: | 72 OF 79 |

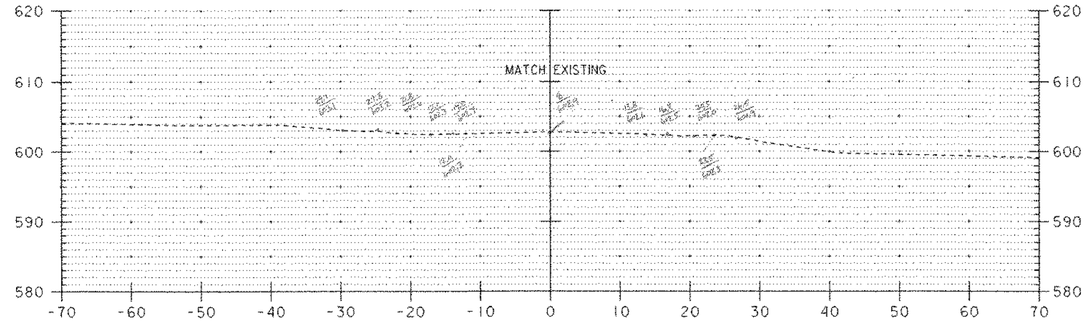
# VT 103



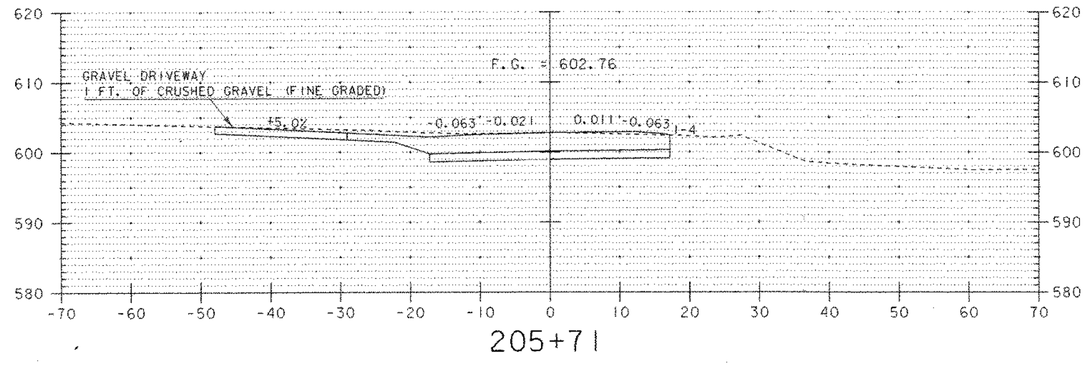

206+00

207+00 END APPROACH

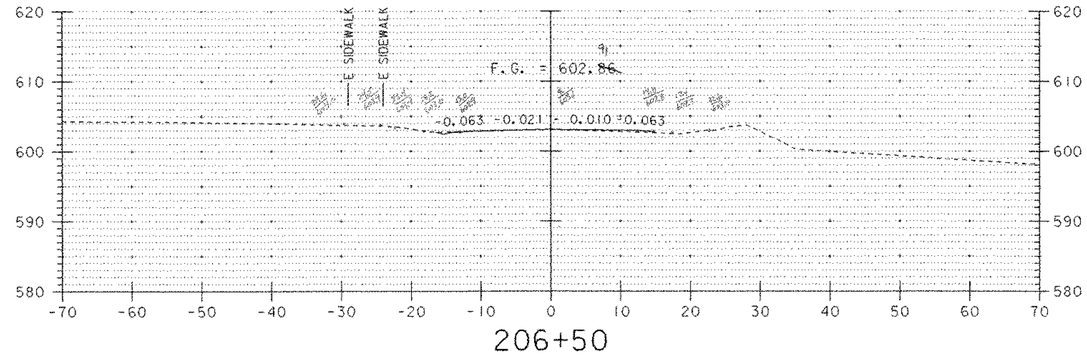
602.92 Existing




207+00




205+71




206+50

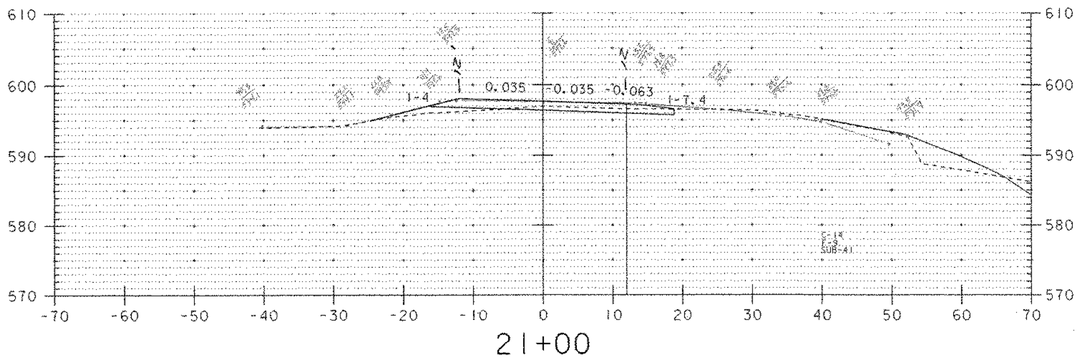
| DATUM | |
|---|---|
| VERTICAL | NGVD 1929 |
| HORIZONTAL | NAD 1927 |

1"=10'
1"=10'
SCALE

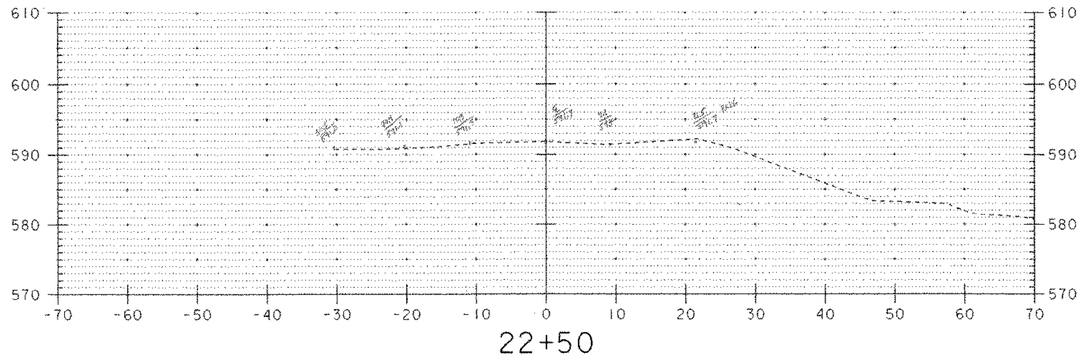
| PROJECT: | PROJECT NO.: |
|---|---|
| CHESTER | BRF 025-1(35) |

| | | | |
|---|---|---|---|
| DESIGN FILE NAME: M:\ 15491 01 VAOT Chester Curv\HWY\DRAW\zfi34xs5.dgn | | | |
| IPARM FILE NAME: | zfi34xs4.i | PLOT DATE: | 28-MAY-2003 |
| SURVEYED BY: | SHERIDAN | SURVEY DATE: | 8/90 |
| SQUAD LEADER: | PORTALUPI | DRAWN BY: | L. BULLOCK |
| VT 103 SECTIONS | | SHEET: | 73 OF 79 |

# TH #6

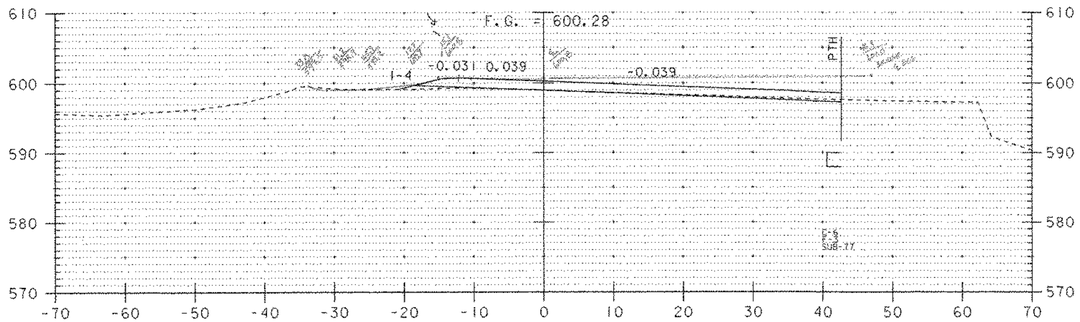



21+00

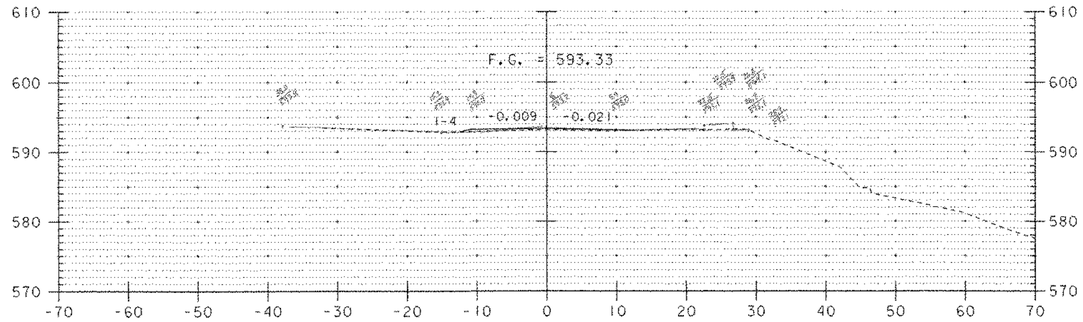



22+50

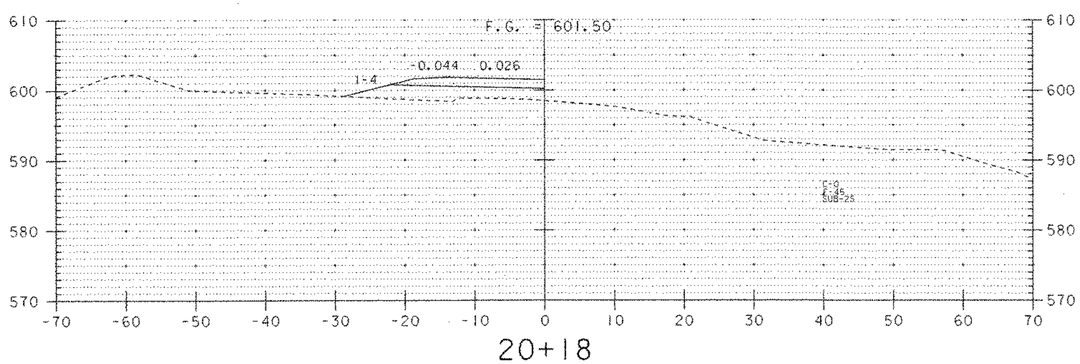
22+25 END APPROACH
MATCH EXISTING AT ELEV. = 592.5



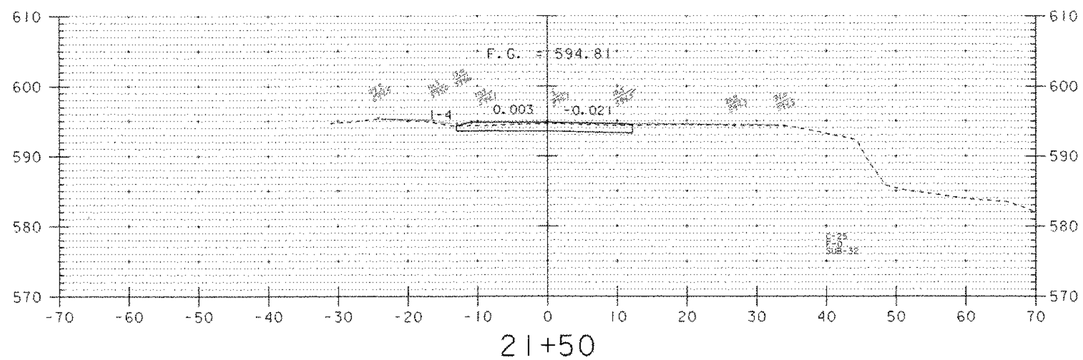

20+50




22+00



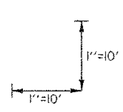

20+18




21+50

**DATUM**

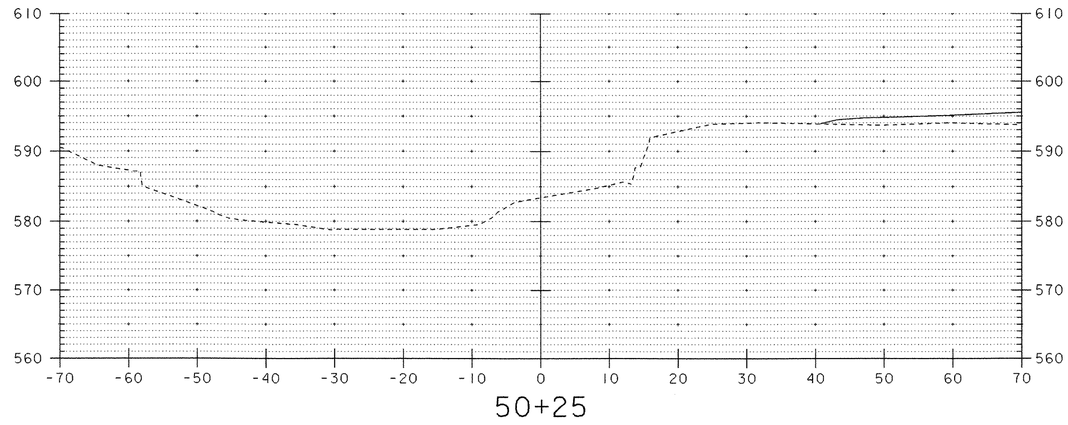
| | |
|---|---|
| VERTICAL | NGVD 1929 |
| HORIZONTAL | NAD 1927 |



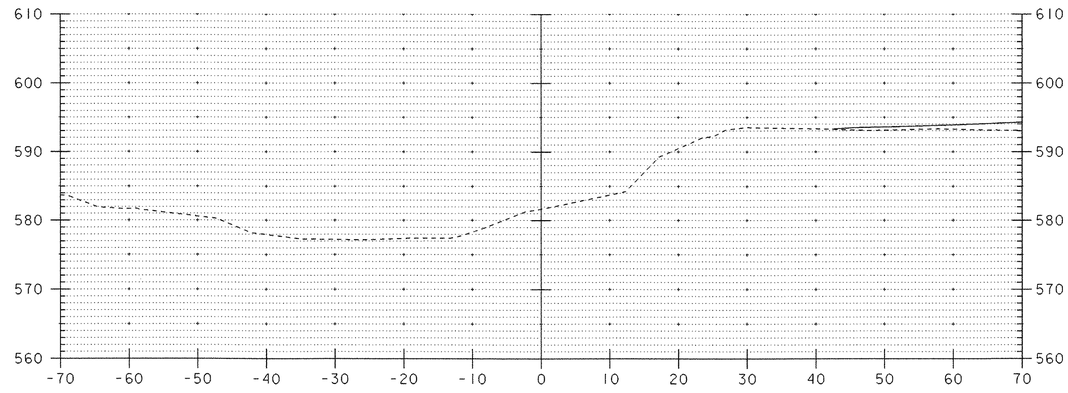

SCALE

| | |
|---|---|
| PROJECT: CHESTER | PROJECT NO.: BRF025-1(35) |
| DESIGN FILE NAME: M:\ 15491O\VAOT Chester Curv\HWY\DRAW\zf134xs5.dgn | |
| IPARM FILE NAME: zf134x6I.I | PLOT DATE: 28-MAY-2003 |
| SURVEYED BY: SHERIDAN | SURVEY DATE: 8/90 |
| SQUAD LEADER: PORTALUPI | DRAWN BY: BULLOCK |
| TH #6 SECTIONS | SHEET: 74 OF 79 |

# CHANNEL LINE #1




50+25



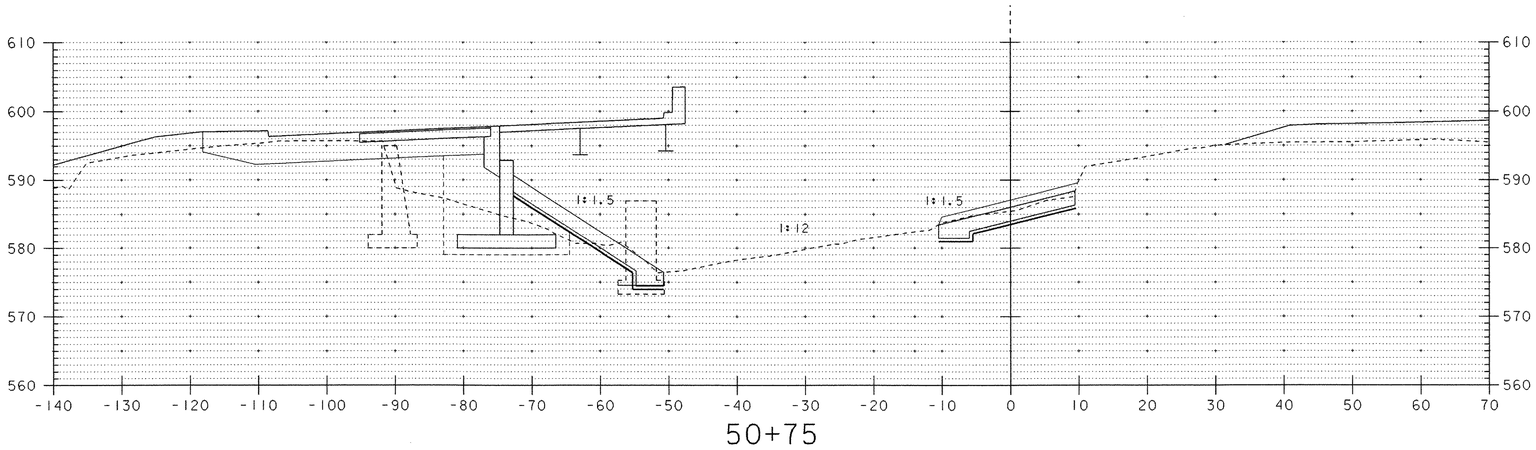

50+00

1"=10'
1"=10'
SCALE

**DATUM**
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

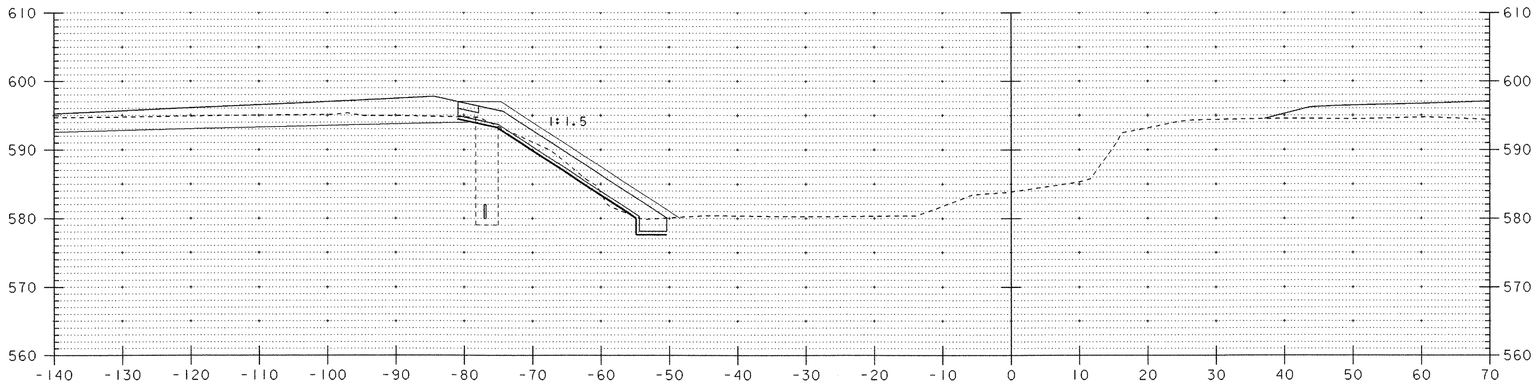
| PROJECT: CHESTER | PROJECT NO.: BRF025-1(35) |
|---|---|
| DESIGN FILE NAME: M:\ 154910IVA0T Chester Curv\HWY\DRAW\zfl34xs5.dgn | |
| IPARM FILE NAME: zfl34cla.i | PLOT DATE: 28-MAY-2003 |
| SURVEYED BY: SHERIDAN | SURVEY DATE: 8/90 |
| SQUAD LEADER: PORTALUPI | DRAWN BY: LACKEY |
| CHANNEL LINE #1 SECTIONS | SHEET: 75 OF 79 |

# CHANNEL LINE #1




50+75

50+55 RT BEGIN
ITEM 203.17 UNCLASSIFIED CHANNEL EXCAVATION
ITEM 706.04 STONE FILL, TYPE II
ITEM 649.31 GEOTEXTILE UNDER STONE FILL
ITEM 651.40 GRUBBING MATERIAL




50+50

50+50 LT
ITEM 706.40 STONE FILL, TYPE I

50+27 LT BEGIN
ITEM 203.17 UNCLASSIFIED CHANNEL EXCAVATION
ITEM 706.04 STONE FILL, TYPE II
ITEM 649.31 GEOTEXTILE UNDER STONE FILL
ITEM 651.40 GRUBBING MATERIAL

1"=10'
1"=10'
SCALE

**DATUM**
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

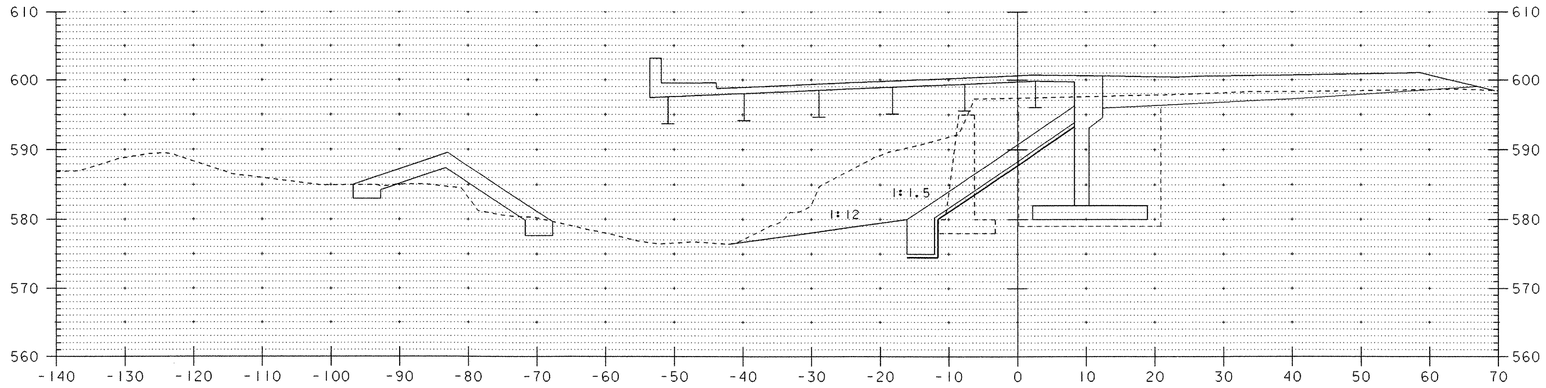
| PROJECT: | PROJECT NO.: |
|---|---|
| CHESTER | BRF025-1(35) |

DESIGN FILE NAME: M:\ 15491O1VAOT Chester Curv\HWY\DRAW\zf134xs5.dgn
IPARM FILE NAME: zf134clb.i
SURVEYED BY: SHERIDAN
SOUAD LEADER: PORTALUPI
CHANNEL LINE #1SECTIONS

PLOT DATE: 28-MAY-2003
SURVEY DATE: 8/90
DRAWN BY: LACKEY
SHEET: 76 OF 79

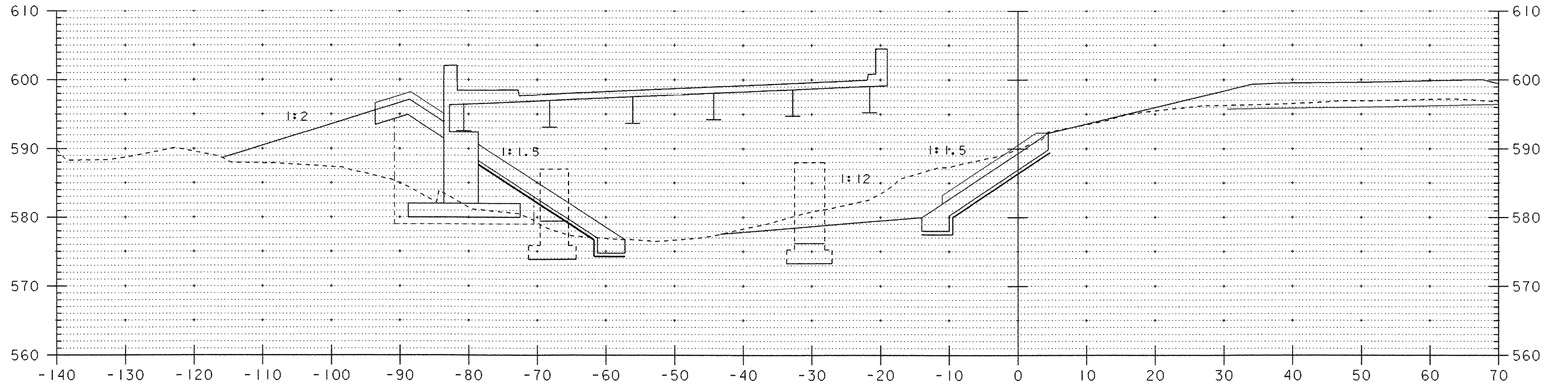
# CHANNEL LINE #1

51+45 LT END
ITEM 203.17 UNCLASSIFIED CHANNEL EXCAVATION
ITEM 706.04 STONE FILL, TYPE II
ITEM 649.31 GEOTEXTILE UNDER STONE FILL
ITEM 651.40 GRUBBING MATERIAL




51+25

51+00 RT
ITEM 706.04 STONE FILL, TYPE II




51+00

50+97 LT
ITEM 706.04 STONE FILL, TYPE I

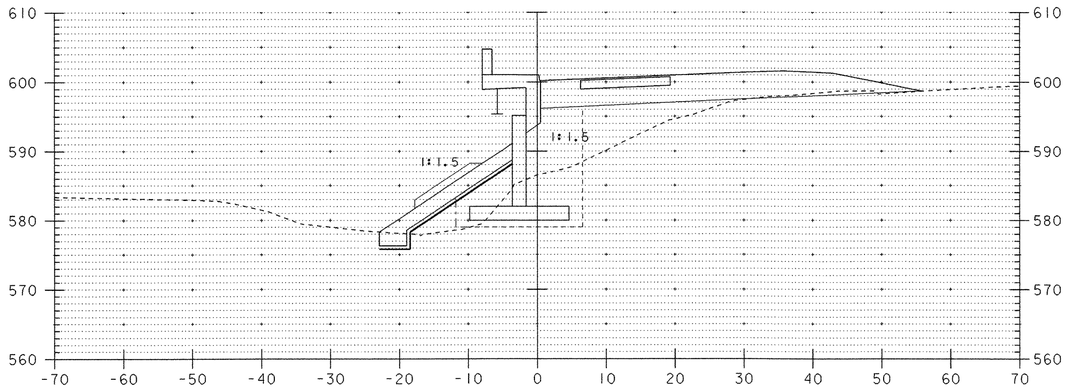
1"=10'
1"=10'
SCALE

**DATUM**
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

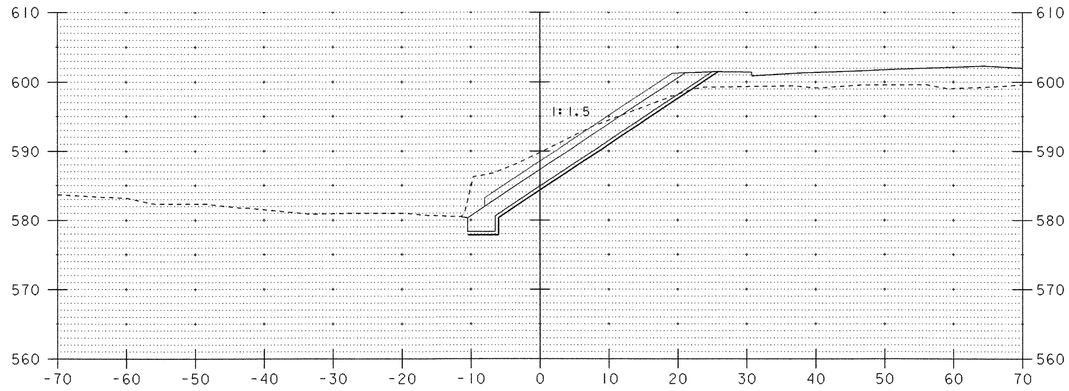
| PROJECT: CHESTER | PROJECT NO.: BRF025-1(35) |
|---|---|
| DESIGN FILE NAME: M:\ 154901VAOT Chester Curv\HWY\DRAW\zfl34xs5.dgn | |
| IPARM FILE NAME: zfl34clc.I | PLOT DATE: 28-MAY-2003 |
| SURVEYED BY: SHERIDAN | SURVEY DATE: 8/90 |
| SQUAD LEADER: PORTALUPI | DRAWN BY: BULLOCK |
| CHANNEL LINE #1 SECTIONS | SHEET: 77 OF 79 |

# CHANNEL LINE #1

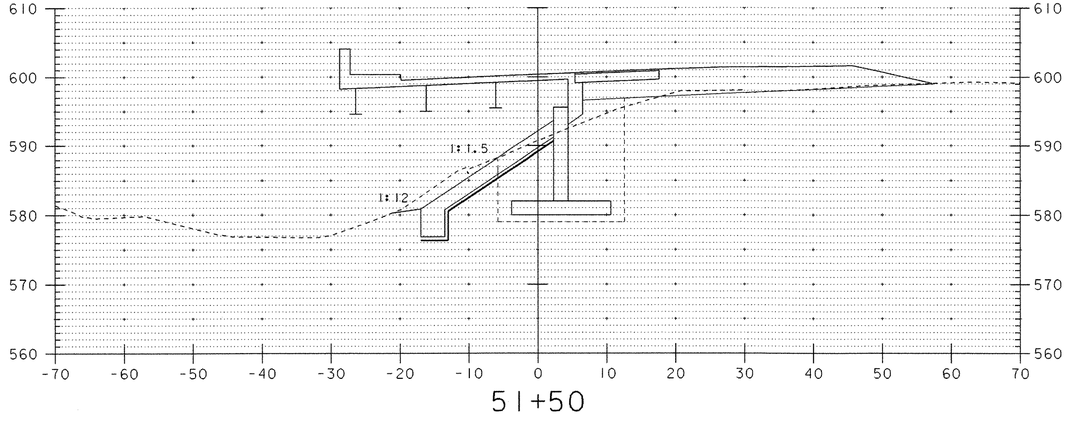
52+40 RT END
ITEM 203.17 UNCLASSIFIED CHANNEL EXCAVATION
ITEM 706.04 STONE FILL, TYPE II
ITEM 649.31 GEOTEXTILE UNDER STONE FILL
ITEM 651.40 GRUBBING MATERIAL



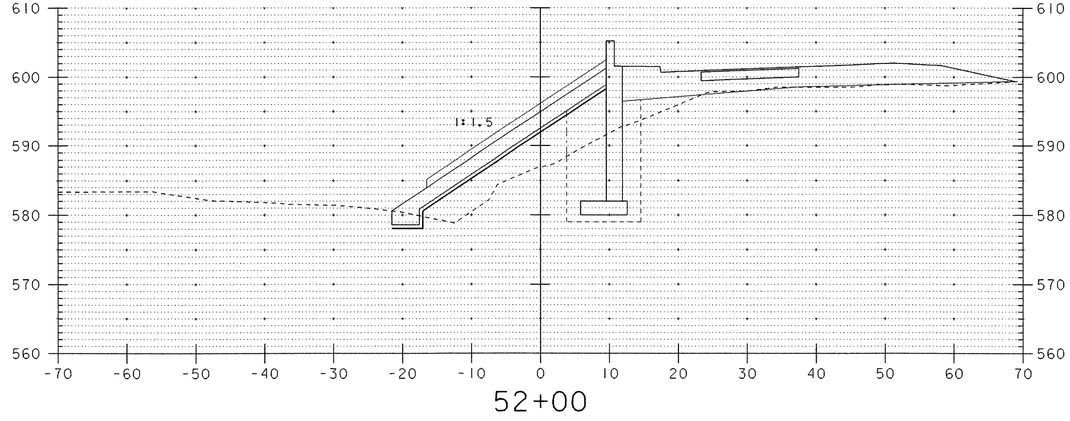

51+75




52+25




51+50




52+00

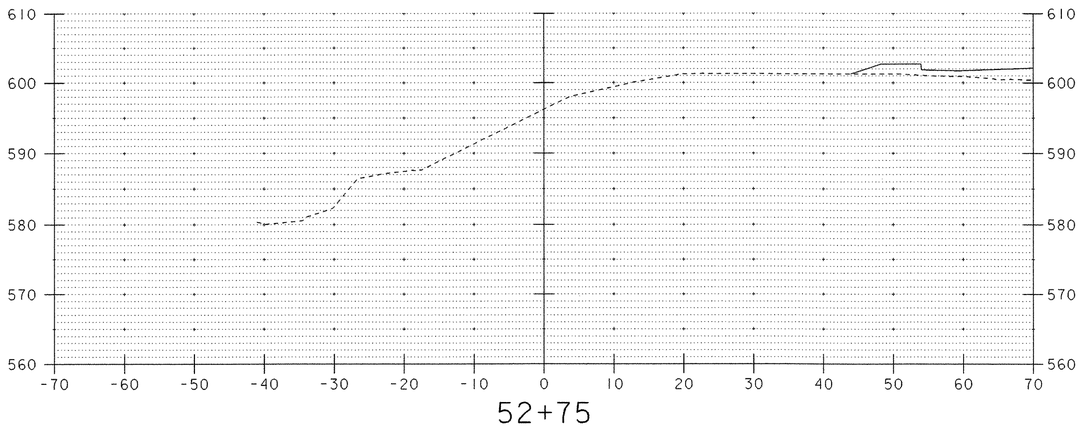
52+00 RT
ITEM 706.04 STONE FILL, TYPE I

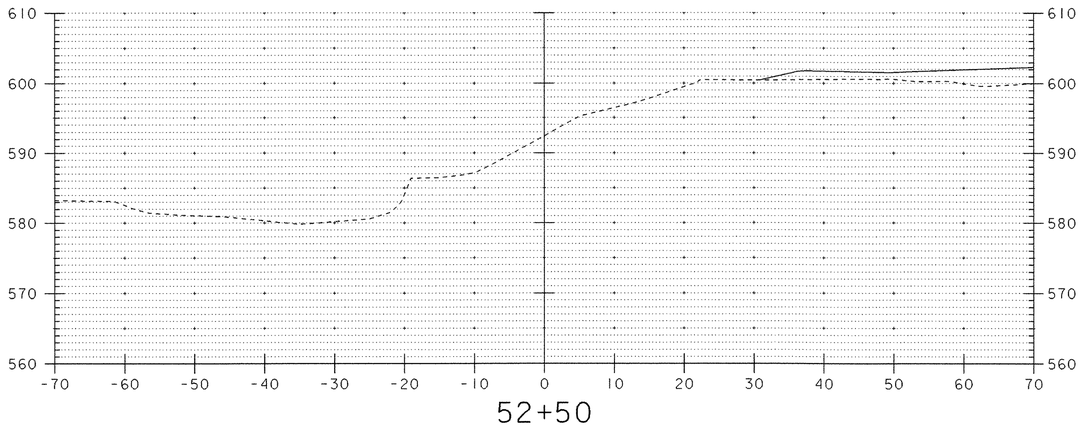
1"=10'
1"=10'
SCALE

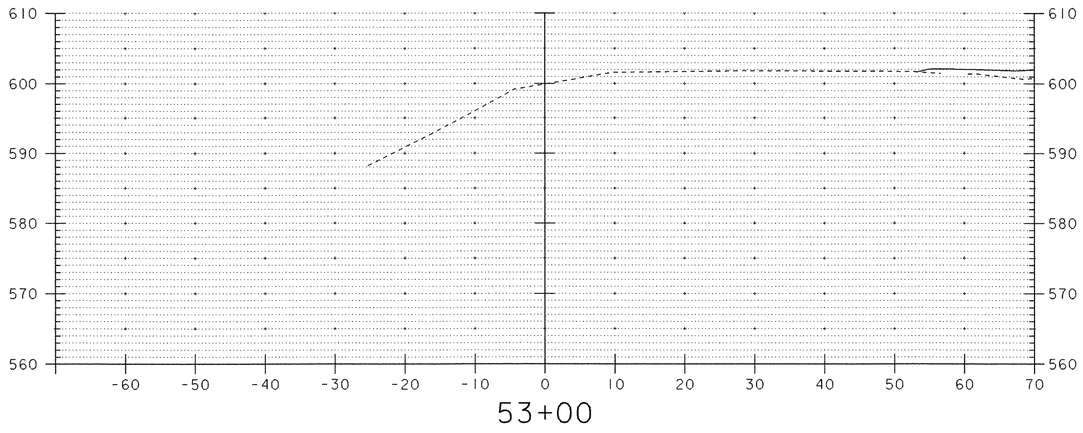
**DATUM**
VERTICAL NGVD 1929
HORIZONTAL NAD 1927

| PROJECT: CHESTER | PROJECT NO.: BRF025-1(35) |
|---|---|
| DESIGN FILE NAME: M:\ 15491O1VAOT Chester Curv\HWY\DRAW\zf134xs5.dgn | |
| IPARM FILE NAME: zf134cld.i | PLOT DATE: 28-MAY-2003 |
| SURVEYED BY: SHERIDAN | SURVEY DATE: 8/90 |
| SQUAD LEADER: PORTALUPI | DRAWN BY: LACKEY |
| CHANNEL LINE #1 SECTIONS | SHEET: 78 OF 79 |

# CHANNEL LINE #1




**DATUM**

VERTICAL NGVD 1929

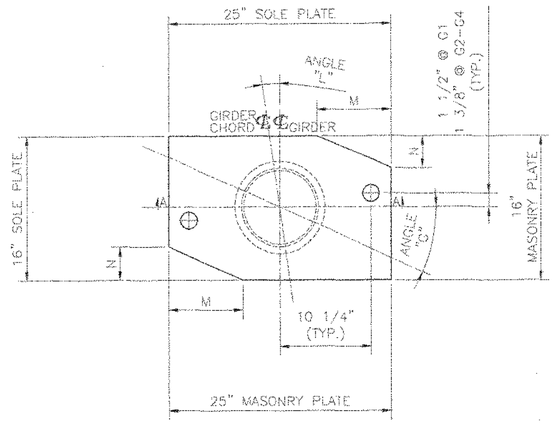
HORIZONTAL NAD 1927

1"=10'

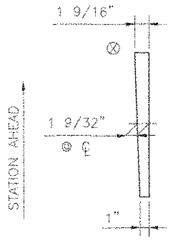
1"=10'

SCALE

| PROJECT: CHESTER | PROJECT NO.: BRF025-1(35) |
|---|---|
| DESIGN FILE NAME: M:\ 15491O1VAOT Chester Curv\HWY\DRAW\zfl34xs5.dgn | |
| IPARM FILE NAME: zfl34cle.i | PLOT DATE: 28-MAY-2003 |
| SURVEYED BY: SHERIDAN | SURVEY DATE: 8/90 |
| SQUAD LEADER: PORTALUPI | DRAWN BY: BULLOCK |
| CHANNEL LINE #1 SECTIONS | SHEET: 79 OF 79 |

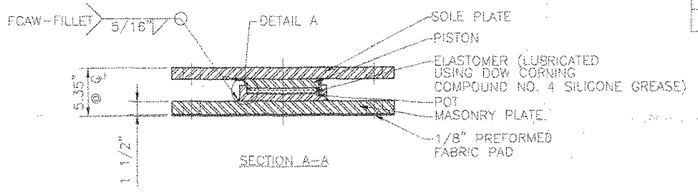



PLAN




SIDE ELEVATION
BEVELED SOLE PLATE ONLY

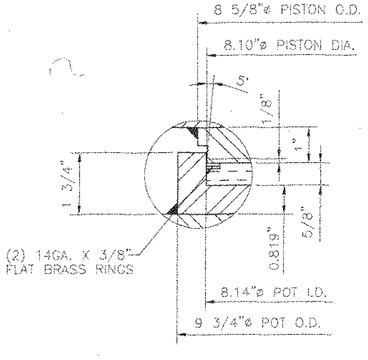
| GIRDER | ANGLE "L" | ANGLE "G" | M | N |
|---|---|---|---|---|
| G1 | 8°04'48" | 23°51'37" | 8 3/8" | 3 11/16" |
| G2 | 7°51'42" | 23°22'10" | 8 3/8" | 3 11/16" |
| G3 | 7°39'24" | 22°53'55" | 8 3/8" | 3 11/16" |
| G4 | 7°27'48" | 22°26'50" | 8 3/8" | 3 11/16" |
| G5 | 7°16'51" | 22°00'50" | 11 3/4" | 4 3/4" |
| G6 | 7°06'29" | 21°35'50" | 11 3/4" | 4 3/4" |



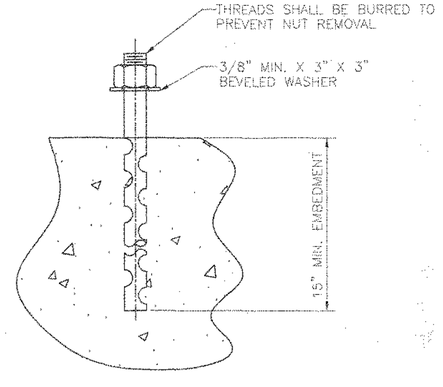

SECTION A-A

FIXED POT BEARING
LOCATION - ABUT. 1, G1-G4
QUANTITY - 4
DESIGN LOAD - 182 KIPS
HORIZONTAL LOAD- 19 KIPS
MINIMUM ALLOWABLE DESIGN ROTATION - 0.015 RADIANS

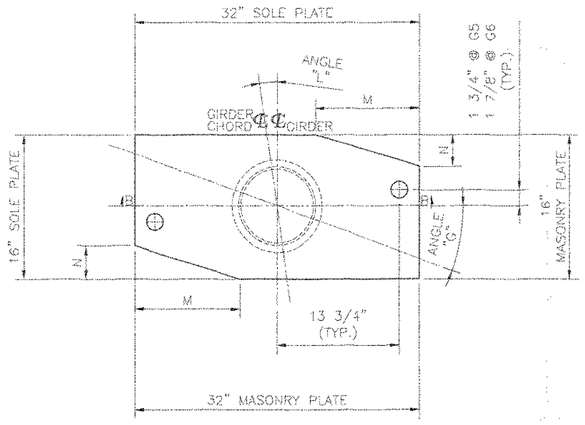
NOTE:
OVERALL HEIGHTS DIFFER FROM THOSE SHOWN ON THE CONTRACT PLANS. CONTRACTOR SHALL ADJUST PEDESTAL HEIGHTS TO ACCURATELY REFLECT THE HEIGHTS OF BEARINGS SUPPLIED.



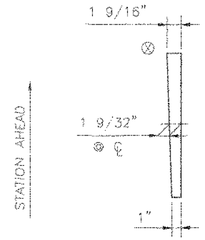

DETAIL A



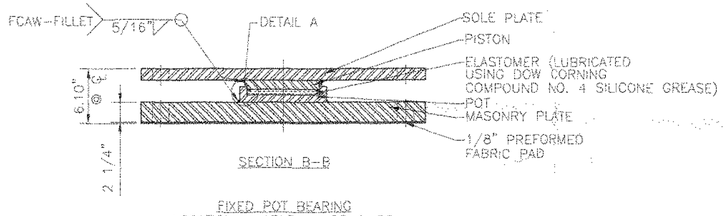

ANCHOR BOLT DETAIL
N.T.S.
1 1/2"ø X 24" LONG ASTM F1554 GR. 55 SWEDGED ANCHOR BOLT WITH 4" OF THREADS ONE END, ONE ASTM A563 HEAVY HEX NUT & ONE A36 PLATE WASHER. ALL GALVANIZED




PLAN




SIDE ELEVATION
BEVELED SOLE PLATE ONLY




SECTION B-B

FIXED POT BEARING
LOCATION - ABUT. 1, G5 & G6
QUANTITY - 2
DESIGN LOAD - 182 KIPS
HORIZONTAL LOAD- 19 KIPS
MINIMUM ALLOWABLE DESIGN ROTATION - 0.015 RADIANS

MATERIAL:
STEEL - ASTM A709 GR. 50W ZINC METALIZED
ELASTOMER - AASHTO 50 DUROMETER NEOPRENE OR NATURAL RUBBER
FLAT BRASS RINGS - ASTM B36 HALF HARD
PREFORMED FABRIC PAD - AASHTO 18.4.10.1 DIV. II

NOTES:
1. BEARINGS MUST NOT BE DISASSEMBLED
2. ALL BEARINGS SHALL BE METALIZED AS PER SECTION 531.04(b) & 506.15 (a) & (b). AREAS OF METALIZED DAMAGED BY FIELD WELDS OR HANDLING SHALL BE REPAIRED PER SUPPLEMENTAL SPECIFICATION 513.06(f).
3. LOCATION OF FABRICATION PLANT - 70 SOUTH ST., WALPOLE, MA 02081
4. COSMEC INC. REPRESENTATIVE - MR. MATT McANDREWS (508-668-6600)
5. ⊗ INDICATES THICK END OF BEVELED SOLE PLATE

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

PROJ. NO. BRF 025-I(35)
HIGHWAY VT 103
VT 103 OVER THE WILLIAMS RIVER
TOWN OF CHESTER

| REV. | | BY | DATE | CK'D | DATE |
|---|---|---|---|---|---|

COSMEC, INC. — 70 SOUTH STREET, WALPOLE, MA. 02081

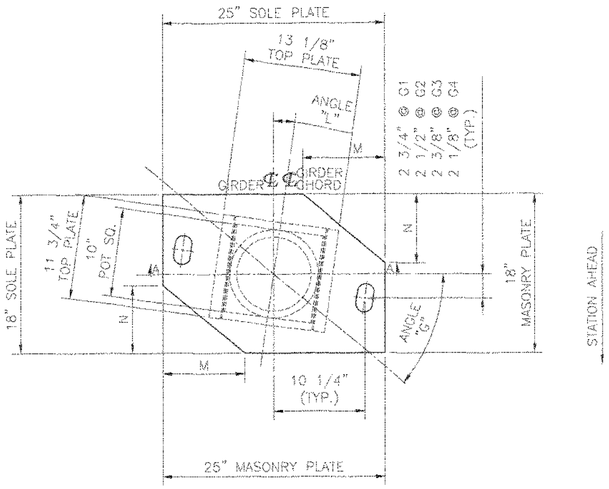
| SCALE: 1/8"=1" | DRAWN BY: NH | CHECKED BY: MCM |
|---|---|---|
| SHEET: 1 OF 3 | DATE: 8/18/03 | DATE: 8/28/03 |

COSMEC POT BEARINGS

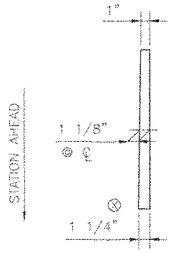
| CUSTOMER | S.O. NUMBER | DRAWING NUMBER | REV. |
|---|---|---|---|
| F.W. WHITCOMB | 59903 | 3921 | |

080 BB

C:\PROJECTS\BRF\VT\59903\VT59903A.dwg, 8/27/2003 10:05:17 AM

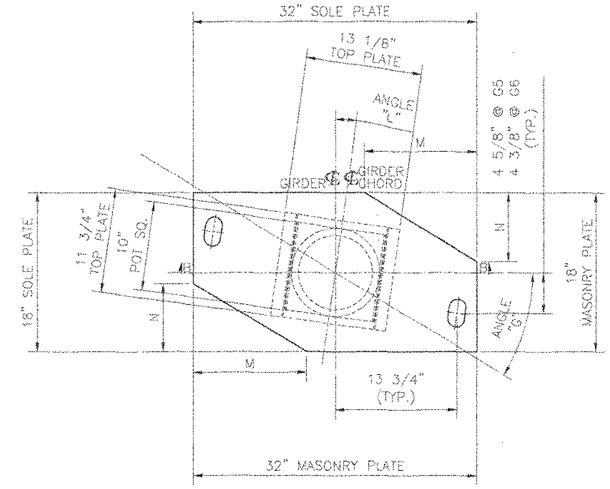



PLAN

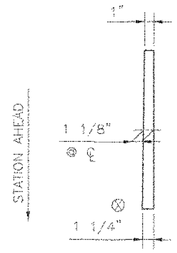



SIDE ELEVATION
BEVELED SOLE PLATE ONLY

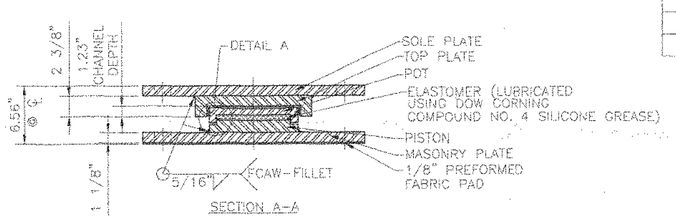
| GIRDER | ANGLE "L" | ANGLE "G" | M | N |
|---|---|---|---|---|
| G1 | 8°04'48" | 40°01'13" | 9 1/2" | 7 3/4" |
| G2 | 7°51'42" | 39°05'34" | 9 1/2" | 7 3/4" |
| G3 | 7°39'24" | 38°12'43" | 9 1/2" | 7 3/4" |
| G4 | 7°27'48" | 37°22'27" | 9 1/2" | 7 3/4" |
| G5 | 7°16'51" | 36°34'32" | 13 1/8" | 9 11/16" |
| G6 | 7°06'29" | 35°48'49" | 13 1/8" | 9 11/16" |




PLAN



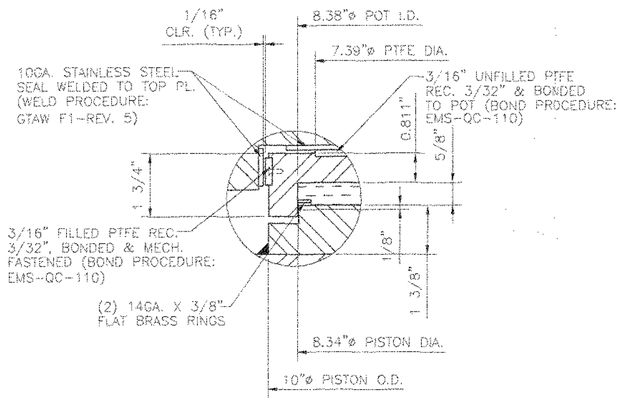

SIDE ELEVATION
BEVELED SOLE PLATE ONLY



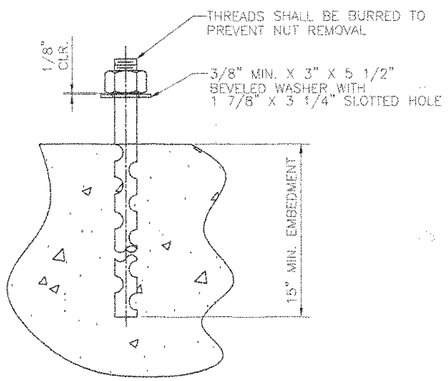

SECTION A-A

GUIDED EXPANSION POT BEARING
LOCATION - ABUT. 1, G1-G4
QUANTITY - 4
DESIGN LOAD - 193 KIPS
HORIZONTAL LOAD- 20 KIPS
TOTAL LONGITUDINAL MOVEMENT - 1 3/4"
TOTAL TRANSVERSE MOVEMENT - 1/8"
MINIMUM ALLOWABLE DESIGN ROTATION - 0.015 RADIANS

NOTE:
OVERALL HEIGHTS DIFFER FROM THOSE SHOWN ON THE CONTRACT PLANS. CONTRACTOR SHALL ADJUST PEDESTAL HEIGHTS TO ACCURATELY REFLECT THE HEIGHTS OF BEARINGS SUPPLIED.

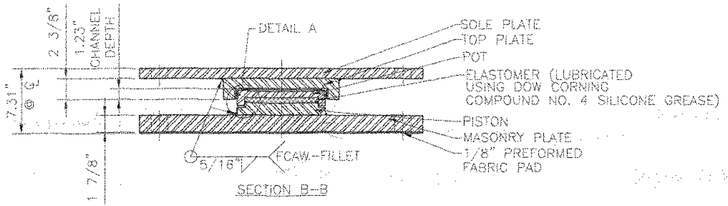



DETAIL A




ANCHOR BOLT DETAIL
N.T.S.

1 1/2"ø X 25" LONG ASTM F1554 GR. 55 SWEDGED ANCHOR BOLT WITH 4" OF THREADS ONE END, ONE ASTM A563 HEAVY HEX NUT & ONE A36 PLATE WASHER. ALL GALVANIZED




SECTION B-B

GUIDED EXPANSION POT BEARING
LOCATION - ABUT. 1, G5 & G6
QUANTITY - 2
DESIGN LOAD - 193 KIPS
HORIZONTAL LOAD- 20 KIPS
TOTAL LONGITUDINAL MOVEMENT - 1 3/4"
TOTAL TRANSVERSE MOVEMENT - 1/8"
MINIMUM ALLOWABLE DESIGN ROTATION - 0.015 RADIANS

MATERIAL:
STEEL - ASTM A709 GR. 50W ZINC METALIZED
ELASTOMER - AASHTO 50 DUROMETER NEOPRENE OR NATURAL RUBBER
FLAT BRASS RINGS - ASTM B36 HALF HARD
PREFORMED FABRIC PAD - AASHTO 18.4.10.1 DIV. II
STAINLESS STEEL - ASTM A240 TYPE 304, 20 RMS FINISH OR LESS
PTFE - ASTM D1457 VIRGIN UNFILLED & FILLED

NOTES:
1. BEARINGS MUST NOT BE DISASSEMBLED
2. ALL BEARINGS SHALL BE METALIZED AS PER SECTION 531.04(b) & 506.15 (a) & (b). AREAS OF METALIZED DAMAGED BY FIELD WELDS OR HANDLING SHALL BE REPAIRED PER SUPPLEMENTAL SPECIFICATION 513.06(f).
3. LOCATION OF FABRICATION PLANT - 70 SOUTH ST., WALPOLE, MA 02081
4. COSMEC INC. REPRESENTATIVE - MR. MATT McANDREWS (508-668-6600)
5. ⊗ INDICATES THICK END OF BEVELED SOLE PLATE
6. PROTECT PTFE & S.S. SURFACES FROM DIRT, WELD SPATTER, & ANY OTHER FOREIGN SUBSTANCES.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROJ. NO. BRF 025-I(35)
HIGHWAY VT 103
VT 103 OVER THE WILLIAMS RIVER
TOWN OF CHESTER

COSMEC, INC. 70 SOUTH STREET WALPOLE, MA. 02081

| SCALE: 1/8"=1" | DRAWN BY: NH | CHECKED BY: MCM |
|---|---|---|
| SHEET: 2 OF 3 | DATE: 8/18/03 | DATE: 8/28/03 |

COSMEC POT BEARINGS

| CUSTOMER | S.O. NUMBER | DRAWING NUMBER | REV. |
|---|---|---|---|
| F.W. WHITCOMB | 59903 | 3922 | |

| REV. | | BY | DATE | CK'D | DATE |
|---|---|---|---|---|---|

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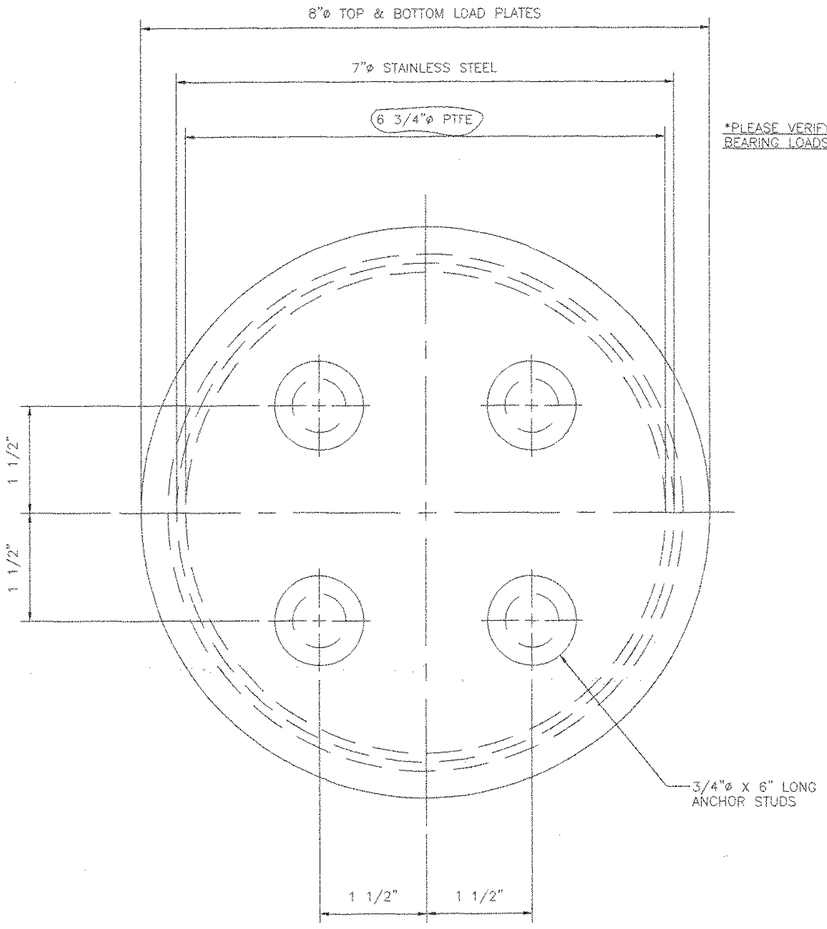
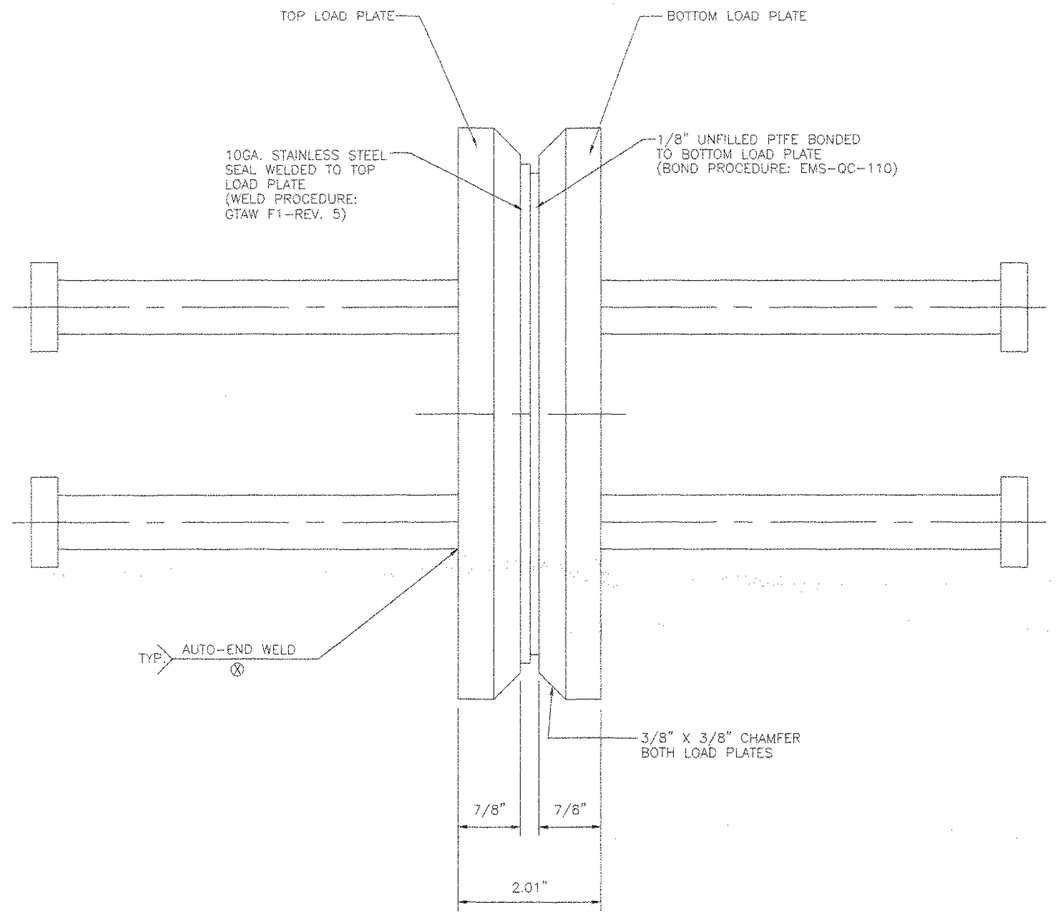
081 BB




*PLEASE VERIFY PTFE SIZE TO BEARING LOADS.

PLAN




SIDE ELEVATION

MATERIAL:
STEEL - ASTM A709 GR. 50W ZINC METALIZED
STAINLESS STEEL - ASTM A240 TYPE 304, 20 RMS FINISH OR LESS
PTFE - ASTM D1457 VIRGIN UNFILLED

DECK BEARING DEVICE
QUANTITY - 1
* PLEASE VERIFY QUANTITY

NOTES:
1. BEARINGS MUST NOT BE DISASSEMBLED
2. ALL BEARINGS SHALL BE METALIZED AS PER SECTION 531.04(b) & 506.15 (a) & (b). AREAS OF METALIZED DAMAGED BY FIELD WELDS OR HANDLING SHALL BE REPAIRED PER SUPPLEMENTAL SPECIFICATION 513.06(f).
3. LOCATION OF FABRICATION PLANT - 70 SOUTH ST., WALPOLE, MA 02081
4. COSMEC INC. REPRESENTATIVE - MR. MATT McANDREWS (508-668-6600)
5. PROTECT PTFE & S.S. SURFACES FROM DIRT, WELD SPATTER, & ANY OTHER FOREIGN SUBSTANCES.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROJ. NO. BRF 025-1(35)
HIGHWAY VT 103
VT 103 OVER THE WILLIAMS RIVER
TOWN OF CHESTER

COSMEC, INC.
70 SOUTH STREET
WALPOLE, MA. 02081

| SCALE: 1"=1" | DRAWN BY: NH | CHECK BY: MCM |
|---|---|---|
| SHEET: 3 OF 3 | DATE: 8/23/03 | DATE: 8/29/03 |

COSMEC PTFE BEARING

| REV. | | DATE |
|---|---|---|

| CUSTOMER | S.O. NUMBER | DRAWING NUMBER | REV. |
|---|---|---|---|
| F.W. WHITCOMB | 59903 | 3923 | |

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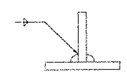
082BB

## EASTERN BRIDGE, LLC
WELDING PROCEDURE SPECIFICATION

| | |
|---|---|
| WPS NUMBER: FCAW PL#10-2 | ISSUE DATE: 11-21-03 |
| PROJECT: VT AOT NO. BRF-0125-1(35) | EB JOB NO.: 4065 |
| BASE METAL: ASTM A709 GR36,50,50W | |
| WELDING PROCESS: FCAW | |
| FILLER METAL SPEC.: A5.29 ESAB 80-NI1 DUAL SHIELD | |
| FLUX/SHIELDING GAS: 75% ARGON / 25% CO2 | |
| CURRENT AND POLARITY: DCEP | ELEC STICKOUT: 1" ± 1/4" |
| WELDING POSITION: 2F | |
| PREHEAT AND INTERPASS TEMP.: AWS D1.5 TABLE 4.4 | WPS QUALIFICATION: AWS D1.5, 5.13 |
| HEAT INPUT: 35 - 44.2 KILOJOULES | |
| SUPPORTING PQR#: FCAW-SA116-1 PL#10 | |

| ELECTRODE SIZE | WELDING AMPS | CURRENT VOLTS | TRAVEL SPEED |
|---|---|---|---|
| 1/16" | 290 - 320 | 24 - 26 | 11.3 - 12.9 |

JOINT DETAIL AND AWS NUMBER: FILLET



NOTES: 8MM FILLET

MINIMUM PREHEAT AND INTERPASS TEMPERATURES SHALL BE AS FOLLOWS:
MAXIMUM INTERPASS TEMPERATURE SHALL BE 450°F

| THICKNESS OF THICKEST PART AT POINT OF WELDING | TEMPERATURE, °F ASTM A709 STEEL |
|---|---|
| UP TO 3/4" | 50°F |
| 3/4" TO 1 1/2" | 70°F |
| 1 1/2" TO 2 1/2" | 150°F |
| OVER 2 1/2" | 225°F |

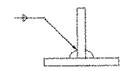
THIS PROCEDURE MAY VARY DUE TO FABRICATION SEQUENCE, FIT UP, PASS SIZE, ETC. WITHIN
THE LIMITS PROVIDED IN APPLICABLE AWS CODES AND CONTRACT DOCUMENTS.

## EASTERN BRIDGE, LLC
WELDING PROCEDURE SPECIFICATION

| | |
|---|---|
| WPS NUMBER: SMAW PL# 00-03 | ISSUE DATE: 11-21-03 |
| PROJECT: VT AOT NO. BRF-0125-1(35) | EB JOB NO.: 4065 |
| BASE METAL: A709 GR36,50,50W | |
| WELDING PROCESS: SMAW | |
| FILLER METAL SPEC.: A5.5 E8018 C3 | |
| FLUX/SHIELDING GAS: N/A | ELEC STICKOUT: N/A |
| CURRENT AND POLARITY: DCEP | |
| WELDING POSITION: 2F | WPS QUALIFICATION: PREQUALIFIED |
| PREHEAT AND INTERPASS TEMP.: AWS D1.5 TABLE 4.4 | |
| HEAT INPUT: 38 - 130 KILOJOULES | SUPPORTING PQR#: N/A |

| ELECTRODE SIZE | WELDING AMPS | CURRENT VOLTS | TRAVEL SPEED |
|---|---|---|---|
| 1/8" | 125 - 150 | 23 - 26 | 3 - 4.5 IPM |
| 5/32" | 140 - 190 | 23 - 26 | 3 - 4.5 IPM |
| 3/16" | 180 - 250 | 23 - 26 | 3 - 4.5 IPM |

JOINT DETAIL AND AWS NUMBER: FILLET 2F




NOTES:

MINIMUM PREHEAT AND INTERPASS TEMPERATURES SHALL BE AS FOLLOWS:
MAXIMUM INTERPASS TEMPERATURE SHALL BE 450°F

| THICKNESS OF THICKEST PART AT POINT OF WELDING | TEMPERATURE, °F ASTM A709 STEEL |
|---|---|
| UP TO 3/4" | 50°F |
| 3/4" TO 1 1/2" | 70°F |
| 1 1/2" TO 2 1/2" | 150°F |
| OVER 2 1/2" | 225°F |

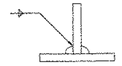
THIS PROCEDURE MAY VARY DUE TO FABRICATION SEQUENCE, FIT UP, PASS SIZE, ETC. WITHIN
THE LIMITS PROVIDED IN APPLICABLE AWS CODES AND CONTRACT DOCUMENTS.

## EASTERN BRIDGE, LLC
WELDING PROCEDURE SPECIFICATION

| | |
|---|---|
| WPS NUMBER: FCAW PL#10-1 | ISSUE DATE: 11-21-03 |
| PROJECT: VT AOT NO. BRF-0125-1(35) | EB JOB NO.: 4065 |
| BASE METAL: ASTM A709 GR36,50,50W | |
| WELDING PROCESS: FCAW | |
| FILLER METAL SPEC.: A5.29 ESAB 80-NI1 DUAL SHIELD | |
| FLUX/SHIELDING GAS: 75% ARGON / 25% CO2 | |
| CURRENT AND POLARITY: DCEP | ELEC STICKOUT: 1" ± 1/4" |
| WELDING POSITION: 2F | |
| PREHEAT AND INTERPASS TEMP.: AWS D1.5 TABLE 4.4 | WPS QUALIFICATION: AWS D1.5, 5.13 |
| HEAT INPUT: 35 - 44.2 KILOJOULES | |
| SUPPORTING PQR#: FCAW - SA116-1 PL#10 | |

| ELECTRODE SIZE | WELDING AMPS | CURRENT VOLTS | TRAVEL SPEED |
|---|---|---|---|
| 1/16" | 290 - 320 | 24 - 26 | 11.3 - 12.9 |

JOINT DETAIL AND AWS NUMBER: FILLET




NOTES:

MINIMUM PREHEAT AND INTERPASS TEMPERATURES SHALL BE AS FOLLOWS:
MAXIMUM INTERPASS TEMPERATURE SHALL BE 450°F

| THICKNESS OF THICKEST PART AT POINT OF WELDING | TEMPERATURE, °F ASTM A709 STEEL |
|---|---|
| UP TO 3/4" | 50°F |
| 3/4" TO 1 1/2" | 70°F |
| 1 1/2" TO 2 1/2" | 150°F |
| OVER 2 1/2" | 225°F |

THIS PROCEDURE MAY VARY DUE TO FABRICATION SEQUENCE, FIT UP, PASS SIZE, ETC. WITHIN
THE LIMITS PROVIDED IN APPLICABLE AWS CODES AND CONTRACT DOCUMENTS.

## EASTERN BRIDGE, LLC
WELDING PROCEDURE SPECIFICATION

| | |
|---|---|
| WPS NUMBER: SAW PL#8-1 | ISSUE DATE: 11-21-03 |
| PROJECT: VT AOT NO. BRF-0125-1(35) | EB JOB NO.: 4065 |
| BASE METAL: ASTM A709 GR36,50,50W | |
| WELDING PROCESS: SUBMERGED ARC WELDING | |
| FILLER METAL SPEC.: AWS A5.13 LINCOLN LA75 | |
| FLUX/SHIELDING GAS: LINCOLN 960 | |
| CURRENT AND POLARITY: DCEP | ELEC STICKOUT: 1" ± 1/4" |
| WELDING POSITION: 2F | |
| PREHEAT AND INTERPASS TEMP.: AWS D1.5 TABLE 4.4 | WPS QUALIFICATION: AWS D1.5, 5.13 |
| HEAT INPUT: 50.68 - 73.92 KILOJOULES | SUPPORTING PQR#: SAW A332-3 PL#8 |

| ELECTRODE SIZE | WELDING AMPS | CURRENT VOLTS | TRAVEL SPEED |
|---|---|---|---|
| 3/32" | 396 - 440 | 28.8 - 31.5 | 11.25 - 13.5 |

JOINT DETAIL AND AWS NUMBER: FILLET

NOTES: 8MM

MINIMUM PREHEAT AND INTERPASS TEMPERATURES SHALL BE AS FOLLOWS:
MAXIMUM INTERPASS TEMPERATURE SHALL BE 450°F

| THICKNESS OF THICKEST PART AT POINT OF WELDING | TEMPERATURE, °F ASTM A709 STEEL |
|---|---|
| UP TO 3/4" | 50°F |
| 3/4" TO 1 1/2" | 70°F |
| 1 1/2" TO 2 1/2" | 150°F |
| OVER 2 1/2" | 225°F |

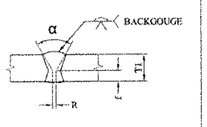
THIS PROCEDURE MAY VARY DUE TO FABRICATION SEQUENCE, FIT UP, PASS SIZE, ETC. WITHIN
THE LIMITS PROVIDED IN APPLICABLE AWS CODES AND CONTRACT SPECIFICATIONS.

## EASTERN BRIDGE, LLC
WELDING PROCEDURE SPECIFICATION

| | |
|---|---|
| WPS NUMBER: SAW PL#8-3 | ISSUE DATE: 11-21-03 |
| PROJECT: VT AOT NO. BRF-0125-1(35) | EB JOB NO.: 4065 |
| BASE METAL: ASTM A709 GR36,50,50W | |
| WELDING PROCESS: SUBMERGED ARC WELDING | |
| FILLER METAL SPEC.: AWS A5.13 LINCOLN LA75 | |
| FLUX/SHIELDING GAS: LINCOLN 960 | |
| CURRENT AND POLARITY: DCEP | ELEC STICKOUT: 1" ± 1/4" |
| WELDING POSITION: 2F | |
| PREHEAT AND INTERPASS TEMP.: AWS D1.5 TABLE 4.4 | WPS QUALIFICATION: AWS D1.5 5.13 |
| HEAT INPUT: 50.68 - 73.92 KILOJOULES | SUPPORTING PQR#: SAW A332-3 PL#8 |

| ELECTRODE SIZE | WELDING AMPS | CURRENT VOLTS | TRAVEL SPEED |
|---|---|---|---|
| 3/32" | 396 - 440 | 28.8 - 31.5 | 11.25 - 13.5 |

JOINT DETAIL AND AWS NUMBER: B-L2c-S




NOTES:
K = 0
I = 3/8" TO 5/8"
α = 60°

MINIMUM PREHEAT AND INTERPASS TEMPERATURES SHALL BE AS FOLLOWS:
MAXIMUM INTERPASS TEMPERATURE SHALL BE 450°F

| THICKNESS OF THICKEST PART AT POINT OF WELDING | TEMPERATURE, °F ASTM A709 STEEL |
|---|---|
| UP TO 3/4" | 50°F |
| 3/4" TO 1 1/2" | 70°F |
| 1 1/2" TO 2 1/2" | 150°F |
| OVER 2 1/2" | 225°F |

THIS PROCEDURE MAY VARY DUE TO FABRICATION SEQUENCE, FIT UP, PASS SIZE, ETC. WITHIN
THE LIMITS PROVIDED IN APPLICABLE AWS CODES AND CONTRACT SPECIFICATIONS.

| REVISIONS | | |
|---|---|---|
| NO. | DATE | DESCRIPTION |
| | 11/21/03 | Approval |

EASTERN BRIDGE LLC
RURAL RTE 2, BOX 362
CLARENDON, Vt 05743
603-542-5202
FABRICATOR

BIN:

FRANK W. WHITCOMB CONSTRUCTION CO.

CONTRACT: –  STATE: –

BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER
CHESTER, VERMONT

TITLE:
SHOP WELD PROCEDURES

| DRAWN BY | SHOP ORDER | DWG. NO. |
|---|---|---|
| DA 20NOV03 | 4065 | WPS1 |
| CKD BY 11/20/03 Dane Bacon | BLOCK NO. | SHEET NO. 1 / 1 |

083 55

# GENERAL NOTES:

STRUCTURAL STEEL:

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, DATED 2001, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, AND ITS LATEST REVISIONS.
2. ALL STRUCTURAL STEEL SHALL BE FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH SECTION 506.03 OF THE STANDARD SPECIFICATIONS.
3. ALL DIMENSIONS ARE GIVEN AT 68°F UNLESS OTHERWISE NOTED.
4. ALL MEMBERS AND/OR PLATES MARKED (CVN) AND ONLY THOSE MEMBERS MUST MEET THE CHARPY V-NOTCH REQUIREMENTS FOR MAIN MEMBERS AS INDICATED IN SECTION 714 OF THE VERMONT AGENCY OF TRANSPORTATION SPECIFICATIONS OF CONSTRUCTION.
5. ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO M270 GRADE 50W.
6. ALL FIELD CONNECTIONS SHALL BE MADE USING $\frac{7}{8}$ INCH DIAMETER BOLTS MEETING ASTM DESIGNATION A325 TYPE 3 (AASHTO M164). HOLES SHALL BE $\frac{15}{16}$ INCH DIAMETER.
7. ANY BOLT HOLES IN THE WEB OF THE FASCIA GIRDERS NOT OTHERWISE FILLED SHALL BE FILLED WITH BUTTON HEAD OR HEXAGONAL HEAD BOLTS COMPATIBLE WITH THE GIRDER STEEL. THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19.

SHOP APPLIED PAINT SYSTEM:

1. ALL STRUCTURAL STEEL INCLUDING GIRDERS, CROSS FRAMES, STIFFENERS AND LATERAL BRACINGS WITHIN A DISTANCE OF 7'-0" FROM THE END OF THE GIRDER (EXPANSION ENDS) SHALL BE COATED WITH A PROTECTIVE PAINT SYSTEM AS SPECIFIED IN SUPPLEMENTAL SPECIFICATION 513. THE COLOR OF PAINT WILL BE BROWN, COLOR CHIP 20059. GREASING SHALL BE DONE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 513.06(d). (BY OTHERS)
2. ALL COATINGS SHALL BE APPLIED WITHIN THE DRY FILM THICKNESS LIMITS SPECIFIED AND IN NO CASE SHALL THE ZINC PRIMER EXCEED THE SPECIFIED THICKNESS WITHIN THE AREAS OF FAYING CONTACT SURFACES (BOLTED JOINT CONNECTIONS).
3. FINAL SURFACE APPEARANCE OF NEW STEEL, PRIOR TO APPLICATION OF ANY PRIMER, SHALL BE AT LEAST EQUIVALENT TO A "NEAR WHITE" SURFACE PREPARATION GRADE SSPC-SP10 (ASTM D2200 GRADE Sa 2-1/2). THE SURFACE ROUGHNESS (PROFILE) SHALL BE WITHIN THE RANGE OF 0.038 TO 0.064mm (1.5 TO 2.5 mils).

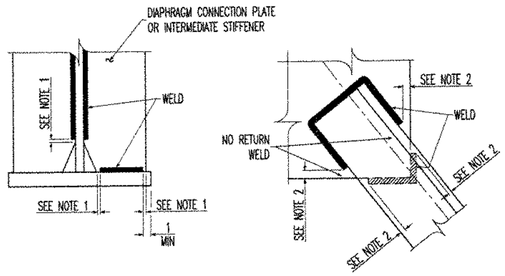
SHOP APPLICATION:

1. FOR SHOP APPLIED SYSTEMS, THE EDGES OF PLATES AND OTHER SHAPES WITH SHARP DISCONTINUITIES SHALL BE STRIPED WITH AN INITIAL COATING APPLIED PRIOR TO THE APPLICATION OF OVERALL COATING. STRICT ATTENTION MUST BE PAID TO THE RECOAT TIMES OF ALL APPLIED MATERIALS WHEN COATING THESE DISCONTINUITIES. BOLTED CONNECTIONS SHALL ALSO HAVE ALL BOLT HEADS AND NUTS STRIPED IN A CIRCULAR MOTION FOLLOWING THE SAME PROCEDURE. FOR REHABILITATION APPLICATIONS, STRIPPING OF THE EDGES OF PLATES, OTHER SHAPES, BOLT HEADS OR NUTS WILL NOT BE REQUIRED IF THE METHOD OF APPLICATION PROVIDES ADEQUATE COVERAGE (THICKNESS) ON THE EDGES.
2. SURFACES WHICH WILL BE INACCESSIBLE AFTER ERECTION SHALL BE COATED PRIOR TO ERECTION WITH ALL THE COATS SPECIFIED FOR THE SYSTEM USED.
3. THE FAYING SURFACES ON GUSSET PLATES, CONNECTION PLATES, SIDEWALK BRACKET, AND SPLICE PLATES SHALL BE PREPARED AS CLASS "C". THESE SURFACES SHALL BE PROTECTED FROM DAMAGE AND CORROSION PRIOR TO THE CONNECTION.

PAINT SYSTEME: AS MANUFACTURED BY CARBOLINE COMPANY:

| | | |
|---|---|---|
| PRIMER: | CARBOZINC CZ11HS | 2-3 mils DFT |
| INTERMEDIATE: | CARBOGUARD 893 | 4-6 mils DFT |
| FINISH: | CARBOTHANE 133HB | 3-5 mils |

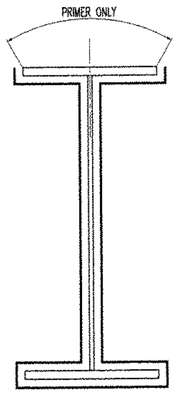
COLOR: BROWN, FEDERAL STANDARD 595, COLOR CHIP NO.20059



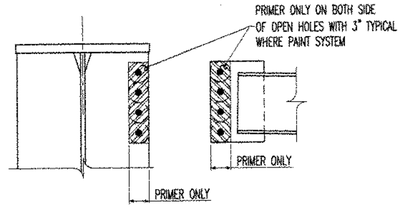

NOTE 1– NO WELD FOR $\frac{3}{4}$ MIN, $\frac{1}{2}$ MAX. (EXCEPT MUST MAINTAIN 1 MIN FROM EDGE OF FLANGE.

NOTE 2– NO WELD FOR $\frac{1}{4}$ MIN, $\frac{1}{2}$ MAX.

WELD TERMINATION DETAIL
NTS




PAINT ZONE DETAIL
NTS




FAYING SURFACES DETAIL
NTS

LIST OF ABREVIATIONS

| | |
|---|---|
| B | BEAM |
| BC | BOTTOM CHORD |
| BOB | BOTTOM OF BASE PLATE |
| BOC | BOTTOM OF CONCRETE |
| BOP | BOTTOM OF PLATE |
| BOS | BOTTOM OF STEEL |
| BOT | BOTTOM |
| BR | BRACE |
| BRG | BEARING |
| (BS) | BOTH SIDES |
| C | COLUMN |
| | CENTERLINE |
| C/C | CENTER TO CENTER |
| CLR | CLEAR |
| CONC | CONCRETE |
| CONST | CONSTRUCTION |
| CONT | CONTINUOUS |
| CONN | CONNECTION |
| CTR | CENTER |
| CVN | CHARPY V-NOTCH REQUIRED |
| D | DEPTH |
| DET | DETAIL |
| DIAG | DIAGONAL |
| DIA | DIAMETER |
| DN | DOWN |
| DWG | DRAWING |
| EA | EACH |
| EL | ELEVATION |
| EM | EMBEDDED MATERIAL |
| EMB | EMBEDDED |
| EQ | EQUAL |
| EXIST | EXISTING |
| F | FRAME |
| FB | FLOOR BEAM |
| FCM | FRACTURE CRITICAL MEMBER |
| FIN FL | FINISH FLOOR |
| FLG | FLANGE |
| FLR | FLOOR |
| FP | FLOOR PLATE |
| (FS) | FAR SIDE |
| G | GIRT |
| GA | GAUGE |
| GALV | GALVANIZED |
| GOSL | GAUGE OUTSTANDING LEG |
| GR | GRATING |
| GRD | GROUND |
| H | HANGER |
| HOR | HORIZONTAL |
| HR | HANDRAIL |
| HS | HIGH-STRENGTH |
| ID | INSIDE DIAMETER |
| IN | INCHES |
| L | LADDERS |

| | |
|---|---|
| MAX | MAXIMUM |
| MIN | MINIMUM |
| ML | MATERIAL LOOSE |
| MS | MISCELLANEOUS |
| (NS) | NEAR SIDE |
| NTS | NOT TO SCALE |
| O/ALL | OVERALL |
| OC | ON CENTERS |
| OD | OUTSIDE DIAMETER |
| OH | OPPOSITE HAND |
| OPNG | OPENING |
| OPP | OPPOSITE |
| PC | POINT OF CURVE |
| PL | PLATE |
| PR | PORTAL |
| PRJ | PROJECTION |
| R | RISER |
| R.D. | RUNNING DIMENSION |
| REF | REFERENCE |
| REQ'D | REQUIRED |
| REV | REVISION |
| S | STAIRS |
| SCH | SCHEDULE |
| SECT | SECTION |
| SHT | SHEET |
| SP | SPACE |
| SPA | SPACING |
| SPEC | SPECIFICATION |
| SQ | SQUARE |
| SR | SAG ROD |
| SS | STAINLESS STEEL |
| ST | STRINGER |
| STIFF | STIFFENER |
| STRUCT | STRUCTURAL |
| STL | STEEL |
| STD | STANDARD |
| SW | SIDEWALK BRACKET |
| SYMM | SYMMETRICAL |
| SWT | SHIPPING WEIGHT |
| T | TRUSS |
| TC | TOP CHORD |
| THK | THICKNESS |
| THD | THREAD |
| T&B | TOP & BOTTOM |
| TOC | TOP OF CONCRETE |
| TOG | TOP OF GRATING |
| TOS | TOP OF STEEL |
| TYP | TYPICAL |
| U.N.O. | UNLESS NOTED OTHERWISE |
| VERT | VERTICAL |
| VB | VERTICAL BRACING |
| WP | WORKING POINT |

☑ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

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McFarland-Johnson, Inc.
Date 12-17-03
By RSW

RESERVED FOR STAMPS

EASTERN BRIDGE, LLC
VERMONT ENGINEERING REGISTRATION
12-20-03

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
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| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
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| | | | |
| | | | |
| | | | |
| 8 ✗ | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

| | | | |
|---|---|---|---|
| PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER | | | |
| LOCATION: CHESTER, VERMONT | | | |
| ENGINEER: McFARLAND-JOHNSON, INC. | | | |
| CUSTOMER: EASTERN BRIDGE LLC | | | |
| DRAWING TITLE: GENERAL NOTES | | | |
| DRAWN BY: D.B. | 08/10/03 | JOB NUMBER: 4065 | SHEET NUMBER: GN1 |
| CHECKED BY: L.D. | 11/14/03 | | |

084 55

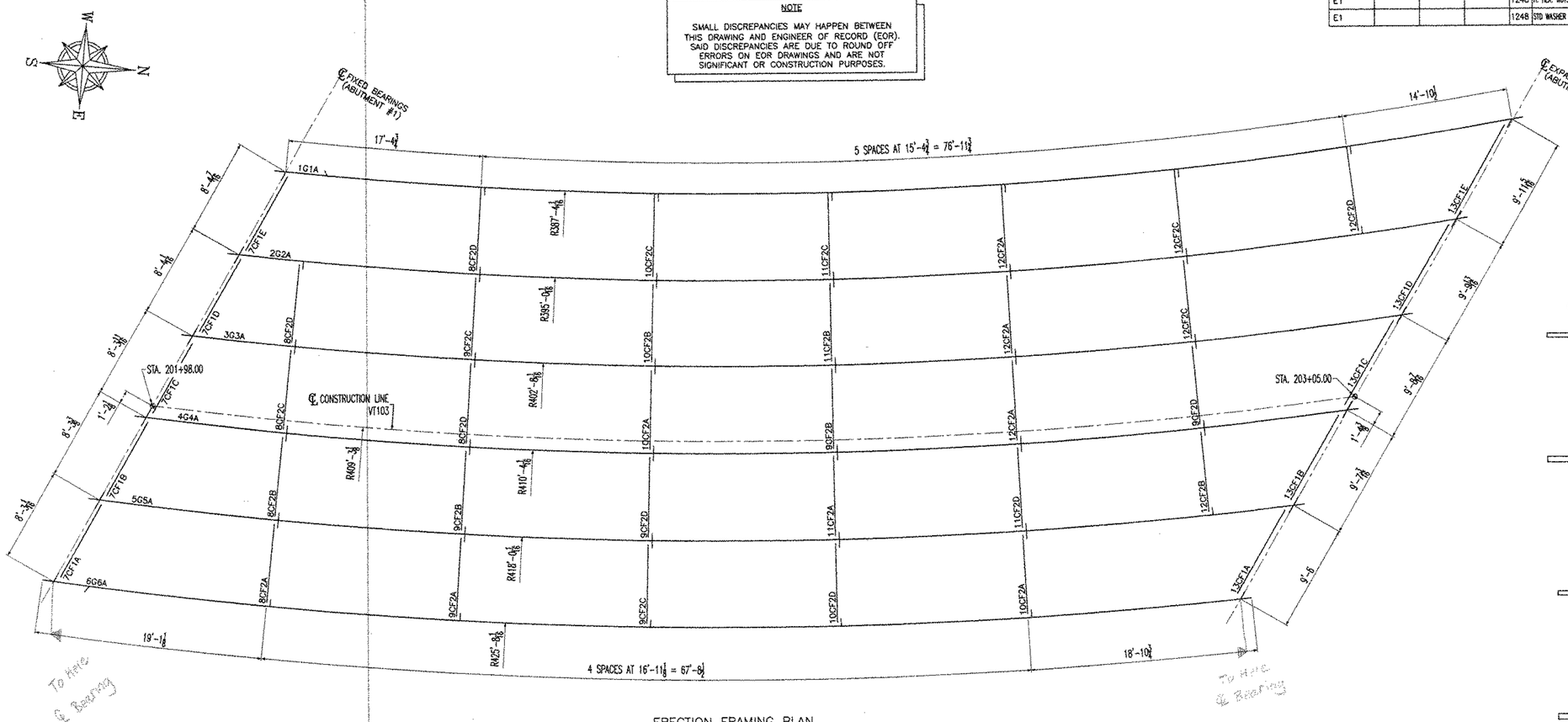
## BILL OF MATERIAL

| Drawing Number | Revision Number | Ship Mark | Piece Mark | Qty | Type of Material | Size of Material | Grade | Length | Weight | Finish | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| E1 | | | | 928 | H.S. BOLTS | 7/8ø | M164 TYPE 3 | 2 1/2 | 944 | | |
| E1 | | | | 320 | H.S. BOLTS | 7/8ø | M164 TYPE 3 | 2 3/4 | 339 | | |
| E1 | | | | 1248 | H. HEX. NUTS | 7/8ø | M291 | | | | |
| E1 | | | | 1248 | STD WASHER | 7/8ø | M293 | | | | |

| | |
|---|---|
| TOTAL WEIGHT | – |
| –CUTS | – |
| +FIELD BOLTS | 1283 |
| +WELD | – |
| NET TOTAL | 1283 |

**NOTE**

SMALL DISCREPANCIES MAY HAPPEN BETWEEN THIS DRAWING AND ENGINEER OF RECORD (EOR). SAID DISCREPANCIES ARE DUE TO ROUND OFF ERRORS ON EOR DRAWINGS AND ARE NOT SIGNIFICANT OR CONSTRUCTION PURPOSES.


℄ FIXED BEARINGS (ABUTMENT #1)
℄ EXPANSION BEARINGS (ABUTMENT #2)
17'-4½
5 SPACES AT 15'-6½ = 76'-11½
14'-10½
1G1A
2G2A
3G3A
4G4A
5G5A
6G6A
7CF1A
7CF1B
7CF1C
7CF1D
7CF1E
8CF2A
8CF2B
8CF2C
8CF2D
9CF2A
9CF2B
9CF2C
9CF2D
10CF2A
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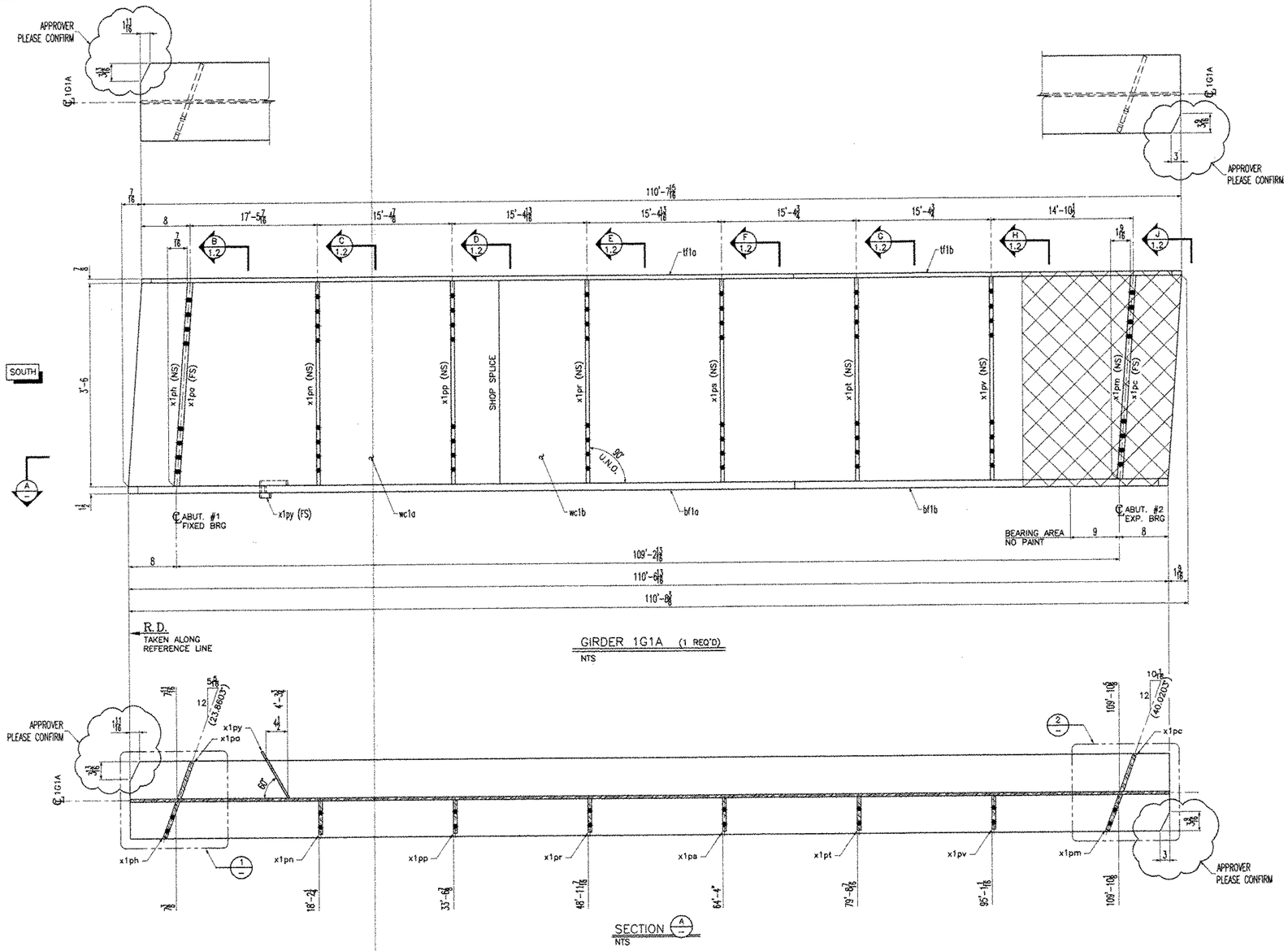
11CF2A
11CF2B
11CF2C
11CF2D
12CF2A
12CF2B
12CF2C
12CF2D
13CF1A
13CF1B
13CF1C
13CF1D
13CF1E
R387'-4⅛
R395'-0⅛
R402'-5⅛
R409'-3⅛
R410'-4⅛
R418'-0⅛
R425'-8⅛
8'-6⅛
8'-4⅛
8'-3⅛
8'-3⅛
8'-1⅛
8'-1⅛
8'-3⅛
8'-3⅛
8'-3

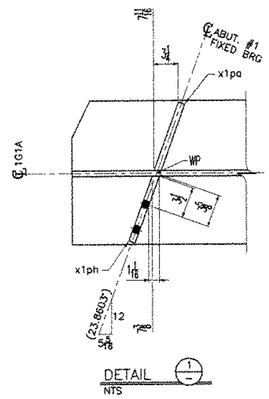
## BILL OF MATERIAL

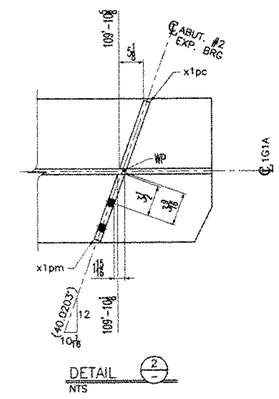
| Drawing Number | Revision Number | Ship Mark | Piece Mark | Qty | Type of Material | Size of Material | Grade | Length | Weight | Finish | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | 1G1A | wc1a | 1 | PL Plate | 5/8x42 | M270-GR50W | 36'-1 3/8 | 3223 | (CVN) | 1 |
| 1 | | 1G1A | wc1b | 1 | PL Plate | 5/8x42 | M270-GR50W | 74'-7 | 6657 | (CVN) | 2 |
| 1 | | 1G1A | tf1a | 1 | PL Plate | 7/8x16 | M270-GR50W | 74'-7 1/16 | 3550 | | 4 |
| 1 | | 1G1A | tf1b | 1 | PL Plate | 7/8x16 | M270-GR50W | 36'-1 | 1718 | | 3 |
| 1 | | 1G1A | bf1a | 1 | PL Plate | 1 1/2x16 | M270-GR50W | 72'-7 3/16 | 5924 | (CVN) | 8 |
| 1 | | 1G1A | bf1b | 1 | PL Plate | 1 1/2x16 | M270-GR50W | 37'-11 3/4 | 3099 | (CVN) | 7 |
| 1 | | 1G1A | x1pa | 1 | PL Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 1 | | 1G1A | x1pc | 1 | PL Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 1 | | 1G1A | x1ph | 1 | PL Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 1 | | 1G1A | x1pm | 1 | PL Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 1 | | 1G1A | x1pn | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 1 | | 1G1A | x1pp | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 1 | | 1G1A | x1pr | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 1 | | 1G1A | x1ps | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 1 | | 1G1A | x1pt | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 1 | | 1G1A | x1pv | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 1 | | 1G1A | x1py | 1 | PL Plate | 1/4x3 1/2 | M270-GR50W | 0'-11 | 3 | | 23 |

| | |
|---|---|
| TOTAL WEIGHT | 24758 |
| -CUTS | 28 |
| +FIELD BOLTS | REFER TO 'E1' DWG |
| +WELD | 130 |
| NET TOTAL | 24860 |

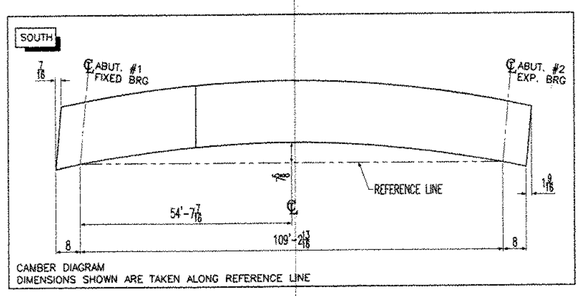



GIRDER 1G1A (1 REQ'D)
NTS

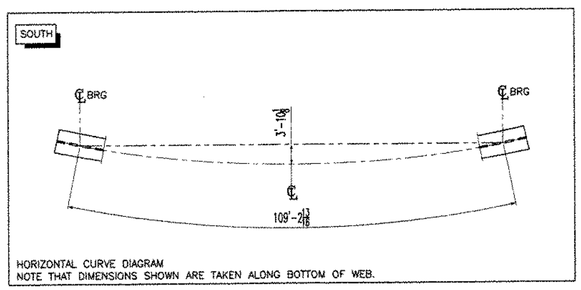



NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/169 (U.N.O.)
3- ⊠ : PAINT ZONE (SEE DRAWING GN1)



CAMBER DIAGRAM
DIMENSIONS SHOWN ARE TAKEN ALONG REFERENCE LINE



HORIZONTAL CURVE DIAGRAM
NOTE THAT DIMENSIONS SHOWN ARE TAKEN ALONG BOTTOM OF WEB.

WORK WITH DRAWING 1.2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☑ Reviewed ☐ Furnish as Corrected
☐ Rejected ☐ Revise and Resubmit
☐ Submit Specified Items

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McFarland-Johnson, Inc.
Date 12-17-03
By RSW
RESERVED FOR STAMPS

11-20-03

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

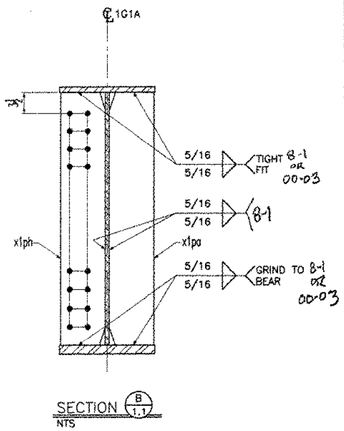
| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 Y | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

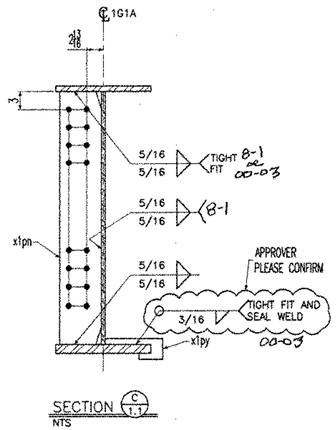
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

| | |
|---|---|
| PROJECT: | BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER |
| LOCATION: | CHESTER, VERMONT |
| ENGINEER: | McFARLAND-JOHNSON, INC. |
| CUSTOMER: | EASTERN BRIDGE LLC |
| DRAWING TITLE: | GIRDER 1G1A |
| DRAWN BY: D.B. 10/22/03 | JOB NUMBER: 4065 |
| CHECKED BY: L.D. 11/14/03 | SHEET NUMBER: 1.1 |

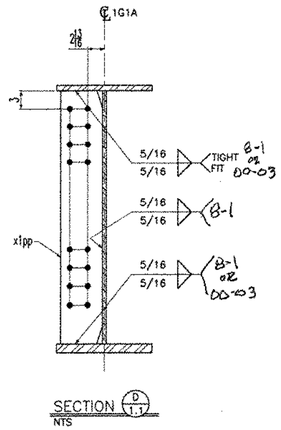
08655




SECTION B 1:1
NTS




SECTION C 1:1
NTS




SECTION D 1:1
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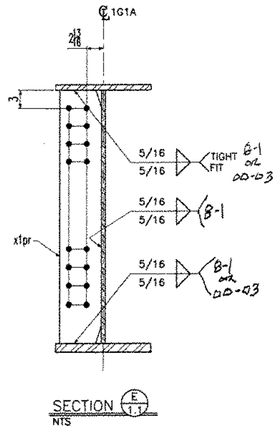


SECTION E 1:1
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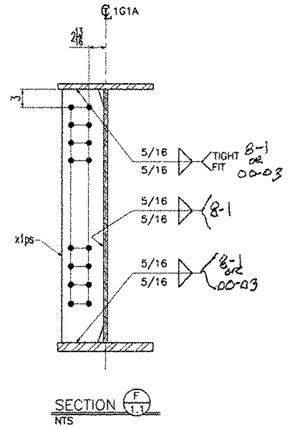


SECTION F 1:1
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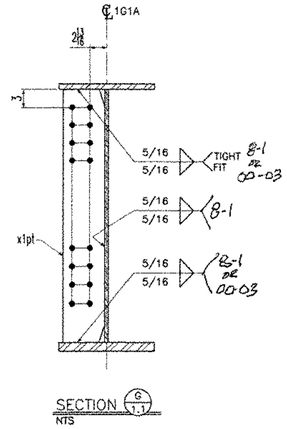


SECTION G 1:1
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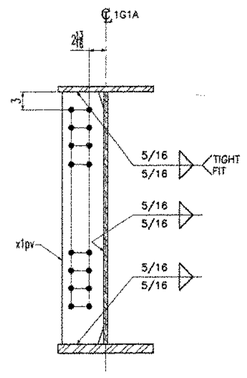


SECTION H 1:1
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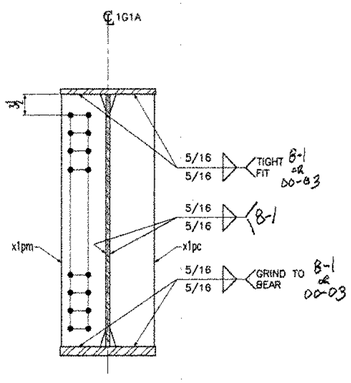


SECTION J 1:1
NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed
☐ Rejected

☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

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McFarland-Johnson, Inc.
Date 12-17-03
By RSW

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 A | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

WORK WITH DRAWING 1.1

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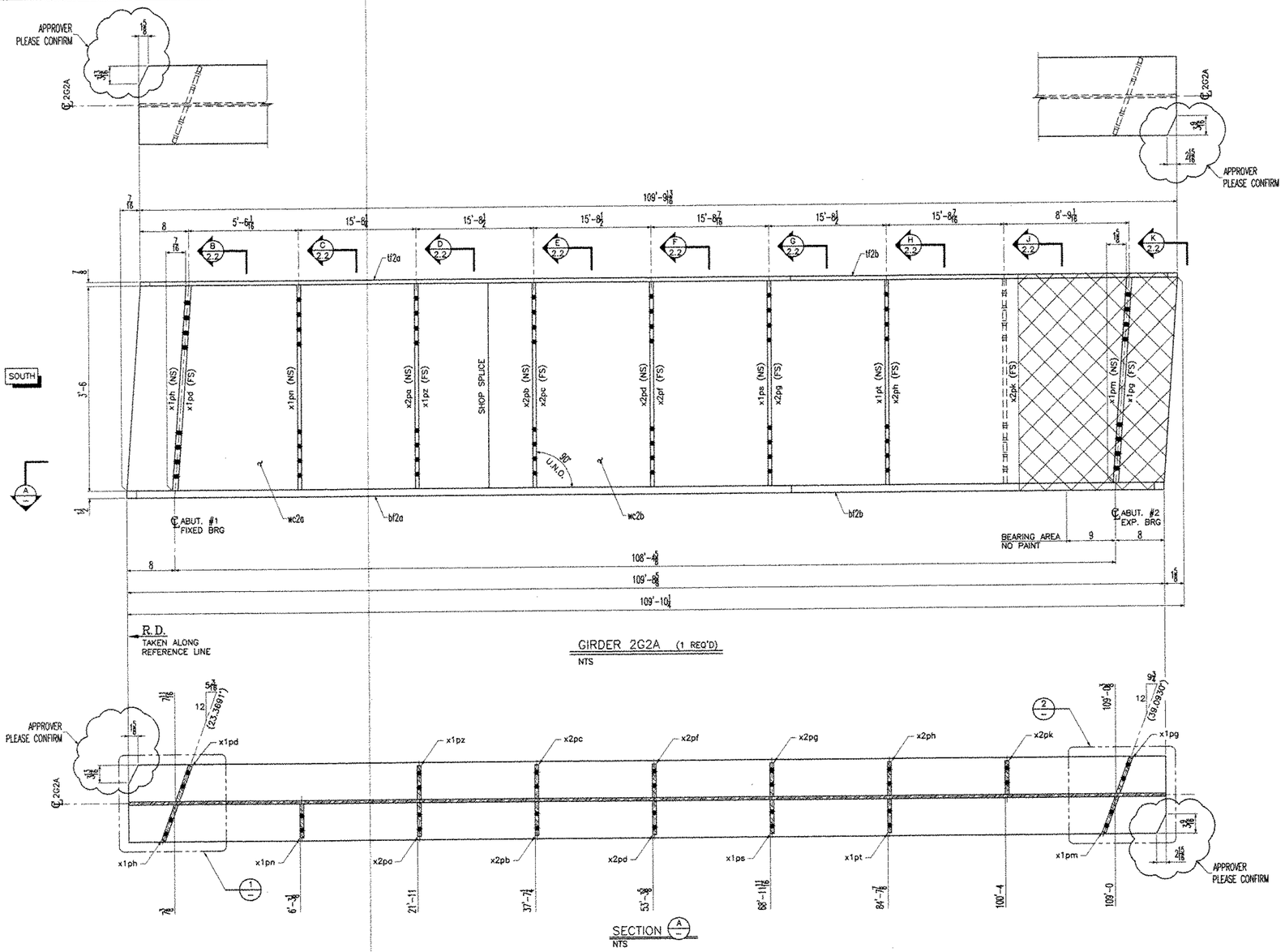
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER
LOCATION: CHESTER, VERMONT
ENGINEER: McFARLAND-JOHNSON, INC.
CUSTOMER: EASTERN BRIDGE LLC
DRAWING TITLE: GIRDER 1G1A
DRAWN BY: D.B. 10/22/03
CHECKED BY: L.D. 11/14/03
JOB NUMBER: 4065
SHEET NUMBER: 1.2

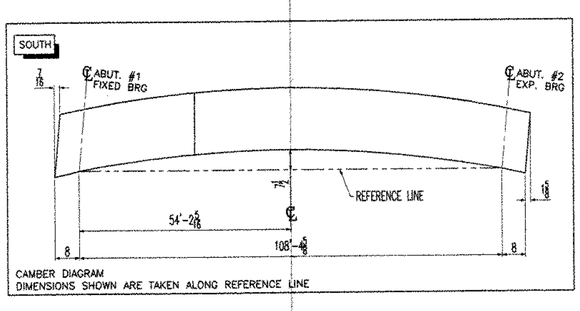
08755



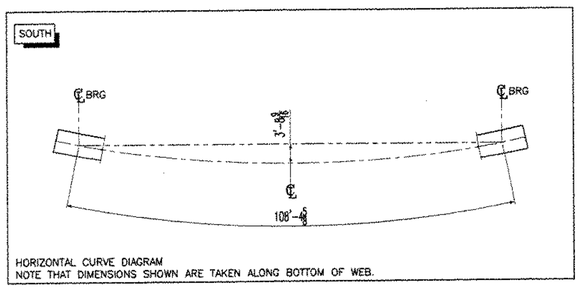

GIRDER 2G2A (1 REQ'D)
NTS



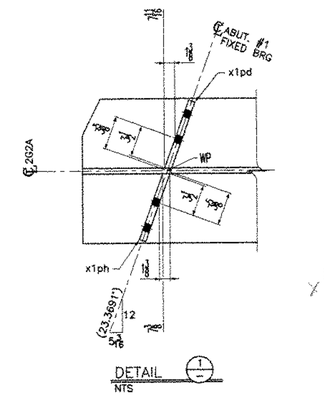

SECTION A
NTS

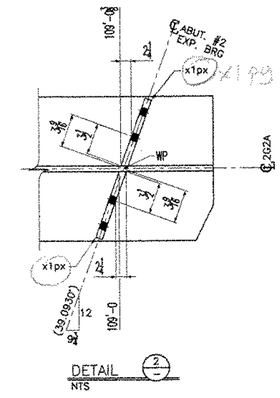



CAMBER DIMENSIONS SHOWN ARE TAKEN ALONG REFERENCE LINE




HORIZONTAL CURVE DIAGRAM
NOTE THAT DIMENSIONS SHOWN ARE TAKEN ALONG BOTTOM OF WEB.




BILL OF MATERIAL

| Drawing Number | Revision Number | Ship Mark | Piece Mark | Qty | Type of Material | Size of Material | Grade | Length | Weight | Finish | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | | 2G2A | wc2a | 1 | PL Plate | 5/8x42 | M270-GR50W | 35'-10 | 3198 | (CVN) | 1 |
| 2 | | 2G2A | wc2b | 1 | PL Plate | 5/8x42 | M270-GR50W | 74'-0 1/4 | 6606 | (CVN) | 2 |
| 2 | | 2G2A | tf2a | 1 | PL Plate | 7/8x16 | M270-GR50W | 74'-0 1/4 | 3523 | | 4 |
| 2 | | 2G2A | tf2b | 1 | PL Plate | 7/8x16 | M270-GR50W | 35'-9 5/8 | 1704 | | 3 |
| 2 | | 2G2A | bf2a | 1 | PL Plate | 1 1/2x16 | M270-GR50W | 72'-0 3/8 | 5874 | (CVN) | 8 |
| 2 | | 2G2A | bf2b | 1 | PL Plate | 1 1/2x16 | M270-GR50W | 37'-8 5/16 | 3076 | (CVN) | 7 |
| 2 | | 2G2A | x1pd | 1 | PL Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 2 | | 2G2A | x1pg | 1 | PL Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 2 | | 2G2A | x1ph | 1 | PL Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 2 | | 2G2A | x1pm | 1 | PL Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 2 | | 2G2A | x1pn | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 2 | | 2G2A | x1ps | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 2 | | 2G2A | x1pt | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 2 | | 2G2A | x1pz | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 2 | | 2G2A | x2pa | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 2 | | 2G2A | x2pb | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 2 | | 2G2A | x2pc | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 2 | | 2G2A | x2pd | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 2 | | 2G2A | x2pf | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 2 | | 2G2A | x2pg | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 2 | | 2G2A | x2ph | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 2 | | 2G2A | x2pk | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |

| | |
|---|---|
| TOTAL WEIGHT | 24817 |
| -CUTS | 30 |
| +FIELD BOLTS | REFER TO 'E1' DWG |
| +WELD | 142 |
| NET TOTAL | 24929 |

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)
3- XXX : PAINT ZONE (SEE DRAWING GN1)

☐ Reviewed ☐ Furnish as Corrected
☐ Rejected ☐ Revise and Resubmit
☐ Submit Specified Item

This review is only for general conformance with the design concept and the submitted plans in the Construction Documents. Corrections or comments made on the shop drawings during this review do not relieve the contractor from compliance with the requirements of the plans and specifications. Review of a specific item shall not include review of an assembly of which the item is a component. The Contractor is responsible for dimensions to be confirmed and correlated at the jobsite, information that pertains solely to the fabrication process or to the means, methods, techniques, sequences and procedures of construction, coordination of the Work with that of all other trades and performing all work in a safe and satisfactory manner.

McFarland-Johnson, Inc.
Date 12-17-03
By RSW
RESERVED FOR STAMPS

EASTERN BRIDGE LLC SHOP DRAWING REVIEW 12-17-03

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 4 | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

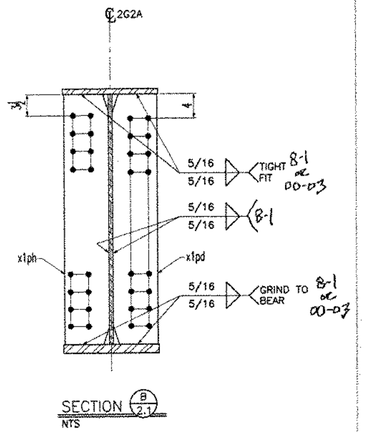
NOTICE
This drawing shall not be used or reproduced in any manner, nor shall any similar drawings or structures be made therefrom, nor shall the information thereon be used for any purpose other than that for which it is released without the written consent of or other of EASTERN BRIDGE LLC.

WORK WITH DRAWING 2.2

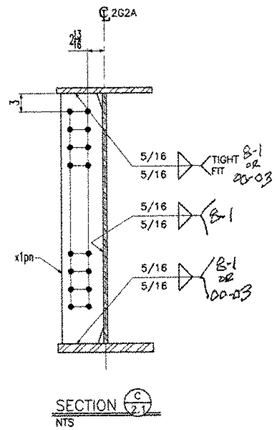
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

| | |
|---|---|
| PROJECT: | BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER |
| LOCATION: | CHESTER, VERMONT |
| ENGINEER: | McFARLAND-JOHNSON, INC. |
| CUSTOMER: | EASTERN BRIDGE LLC |
| DRAWING TITLE: | GIRDER 2G2A |
| DRAWN BY: D.B. 10/22/03 | JOB NUMBER: 4065 |
| CHECKED BY: L.D. 11/14/03 | SHEET NUMBER: 2.1 |

08855




SECTION B 2.1
NTS

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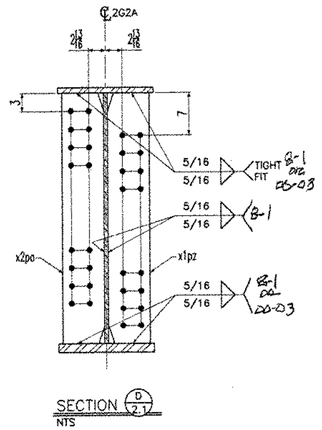


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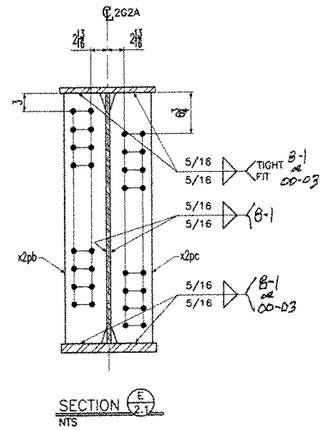


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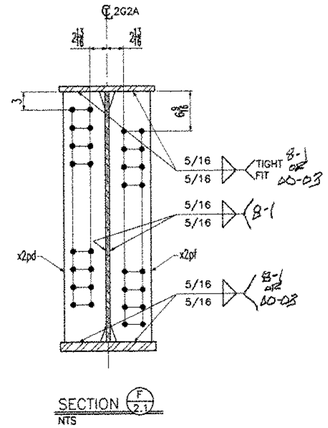


SECTION F 2.1
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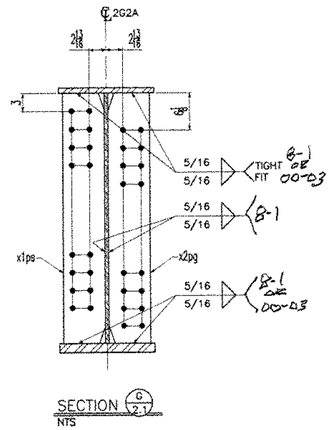
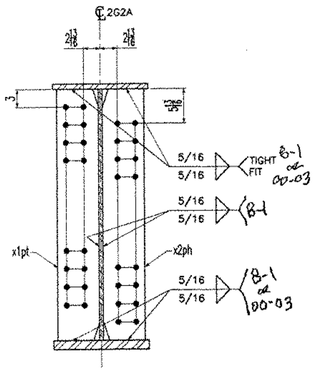



SECTION G 2.1
NTS




SECTION H 2.1
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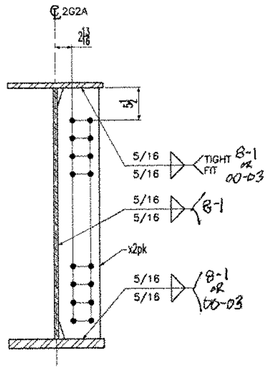


SECTION J 2.1
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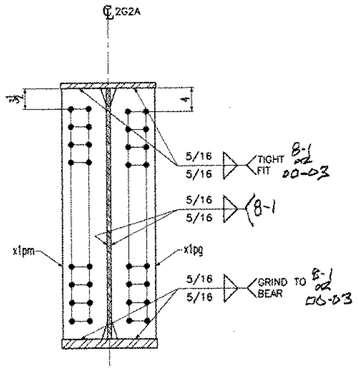


SECTION K 2.1
NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specific Item

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McFarland-Johnson, Inc.
Date 12-17-03
By KSW

RESERVED FOR STAMPS

GA 12.20.03

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 ✗ | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

WORK WITH DRAWING 2.1

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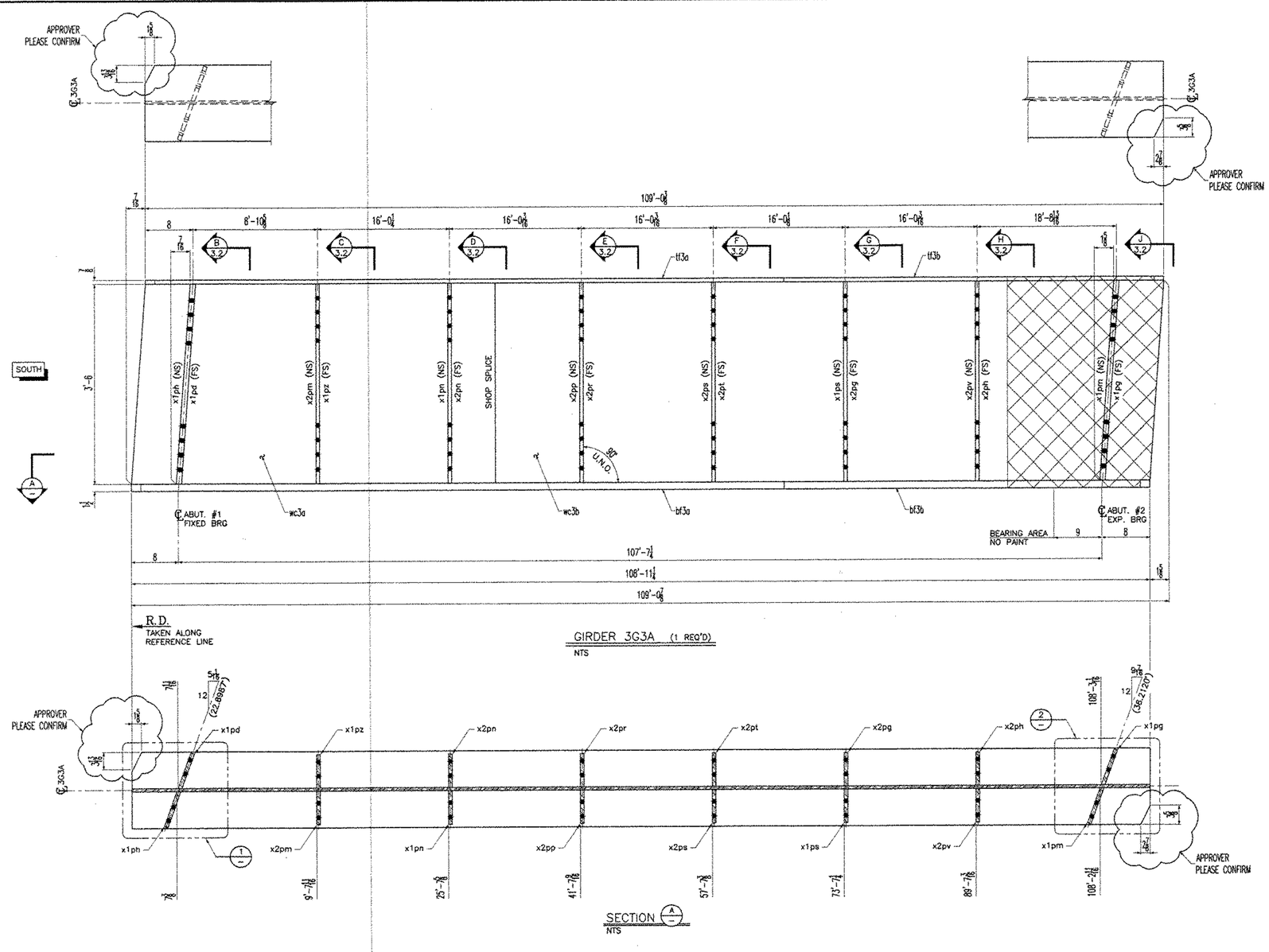
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER
LOCATION: CHESTER, VERMONT
ENGINEER: McFARLAND-JOHNSON, INC.
CUSTOMER: EASTERN BRIDGE LLC
DRAWING TITLE: GIRDER 2G2A
DRAWN BY: D.B. 10/22/03
CHECKED BY: L.D. 11/14/03
JOB NUMBER: 4065
SHEET NUMBER: 2.2

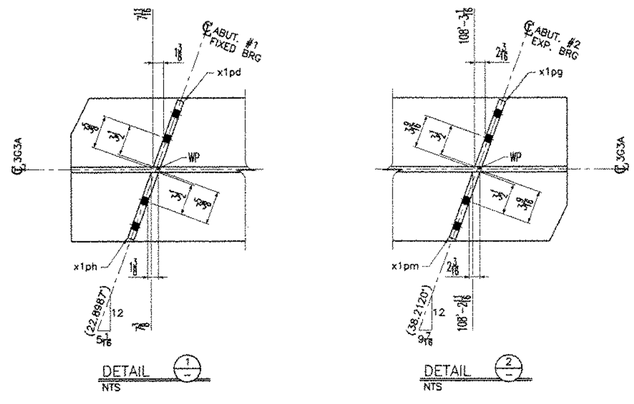
08955



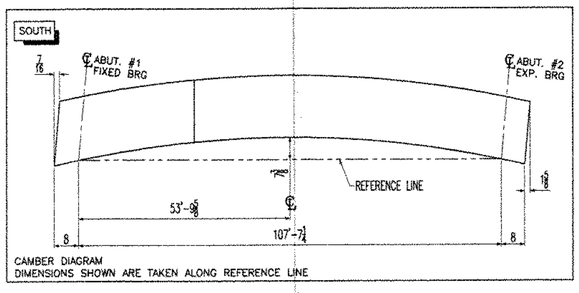

BILL OF MATERIAL

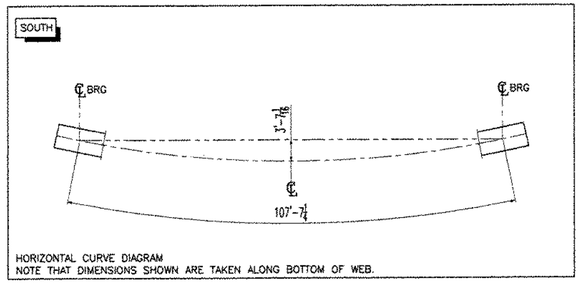
| Drawing Number | Revision Number | Ship Mark | Piece Mark | Qty | Type of Material | Size of Material | Grade | Length | Weight | Finish | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | | 3G3A | wc3a | 1 | PL Plate | 5/8x42 | M270-GR50W | 36'-7 | 3265 | (CVN) | 1 |
| 3 | | 3G3A | wc3b | 1 | PL Plate | 5/8x42 | M270-GR50W | 72'-5 7/8 | 6470 | (CVN) | 2 |
| 3 | | 3G3A | tf3a | 1 | PL Plate | 7/8x16 | M270-GR50W | 72'-6 | 3451 | | 4 |
| 3 | | 3G3A | tf3b | 1 | PL Plate | 7/8x16 | M270-GR50W | 36'-6 1/2 | 1739 | | 3 |
| 3 | | 3G3A | bf3a | 1 | PL Plate | 1 1/2x16 | M270-GR50W | 70'-6 1/8 | 5754 | (CVN) | 8 |
| 3 | | 3G3A | bf3b | 1 | PL Plate | 1 1/2x16 | M270-GR50W | 38'-5 1/4 | 3137 | (CVN) | 7 |
| 3 | | 3G3A | x1pd | 1 | PL Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 3 | | 3G3A | x1ph | 1 | PL Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 3 | | 3G3A | x1pg | 1 | PL Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 3 | | 3G3A | x1pm | 1 | PL Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 3 | | 3G3A | x1pn | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 3 | | 3G3A | x1ps | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 3 | | 3G3A | x1pz | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 3 | | 3G3A | x2pg | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 3 | | 3G3A | x2ph | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 3 | | 3G3A | x2pm | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 3 | | 3G3A | x2pn | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 3 | | 3G3A | x2pp | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 3 | | 3G3A | x2pr | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 3 | | 3G3A | x2ps | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 3 | | 3G3A | x2pt | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 3 | | 3G3A | x2pv | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |

| | |
|---|---|
| TOTAL WEIGHT | 24652 |
| -CUTS | 26 |
| +FIELD BOLTS | REFER TO 'E1' DWG |
| +WELD | 140 |
| NET TOTAL | 24764 |




NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/18ø (U.N.O.)
3- ▨ : PAINT ZONE (SEE DRAWING GN1)




☒ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

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McFarland-Johnson, Inc.
Date: 12-17-03
By: RSW

RESERVED FOR STAMPS

VT AGENCY OF TRANSPORTATION
11-20-03

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 'S' | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

NOTICE
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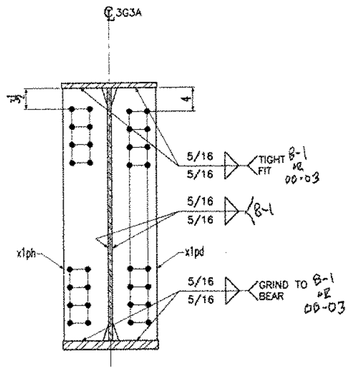
WORK WITH DRAWING 3.2

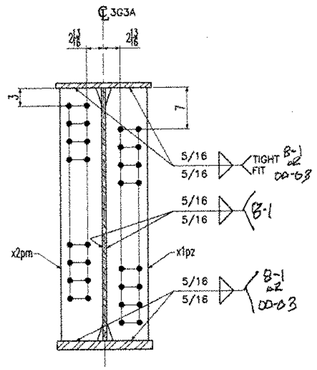
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER
LOCATION: CHESTER, VERMONT
ENGINEER: McFARLAND-JOHNSON, INC.
CUSTOMER: EASTERN BRIDGE LLC
DRAWING TITLE: GIRDER 3G3A
DRAWN BY: D.B. 10/27/03
CHECKED BY: L.D. 11/14/03
JOB NUMBER: 4065
SHEET NUMBER: 3.1

09055




SECTION B 3.1
NTS




SECTION C 3.1
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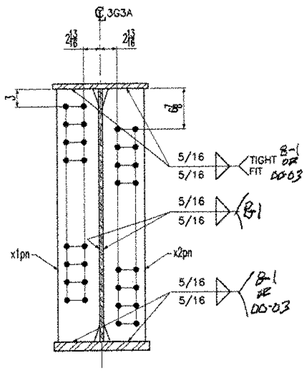


SECTION D 3.1
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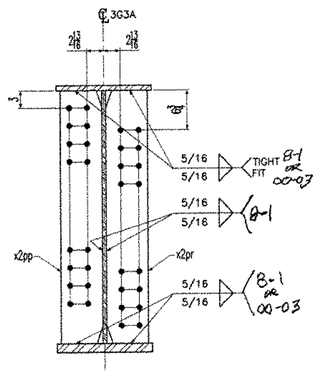


SECTION E 3.1
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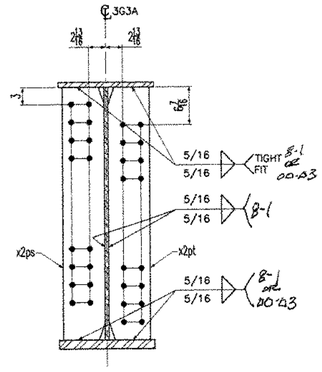


SECTION F 3.1
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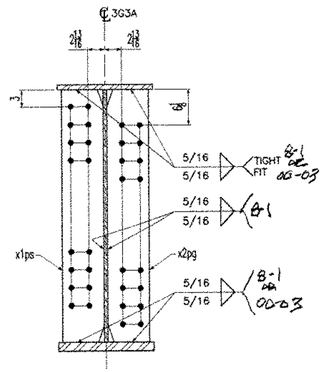


SECTION G 3.1
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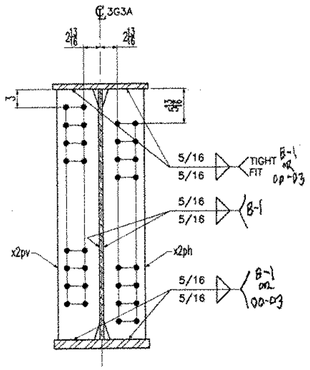
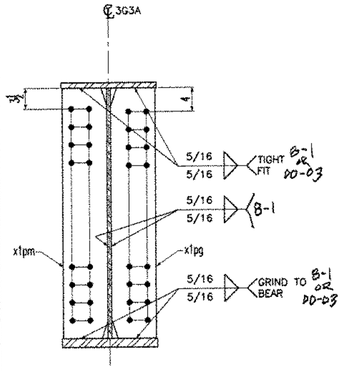



SECTION H 3.1
NTS




SECTION J 3.1
NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

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McFarland-Johnson, Inc.

Date 12-17-03

By RSW

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| 8 sets | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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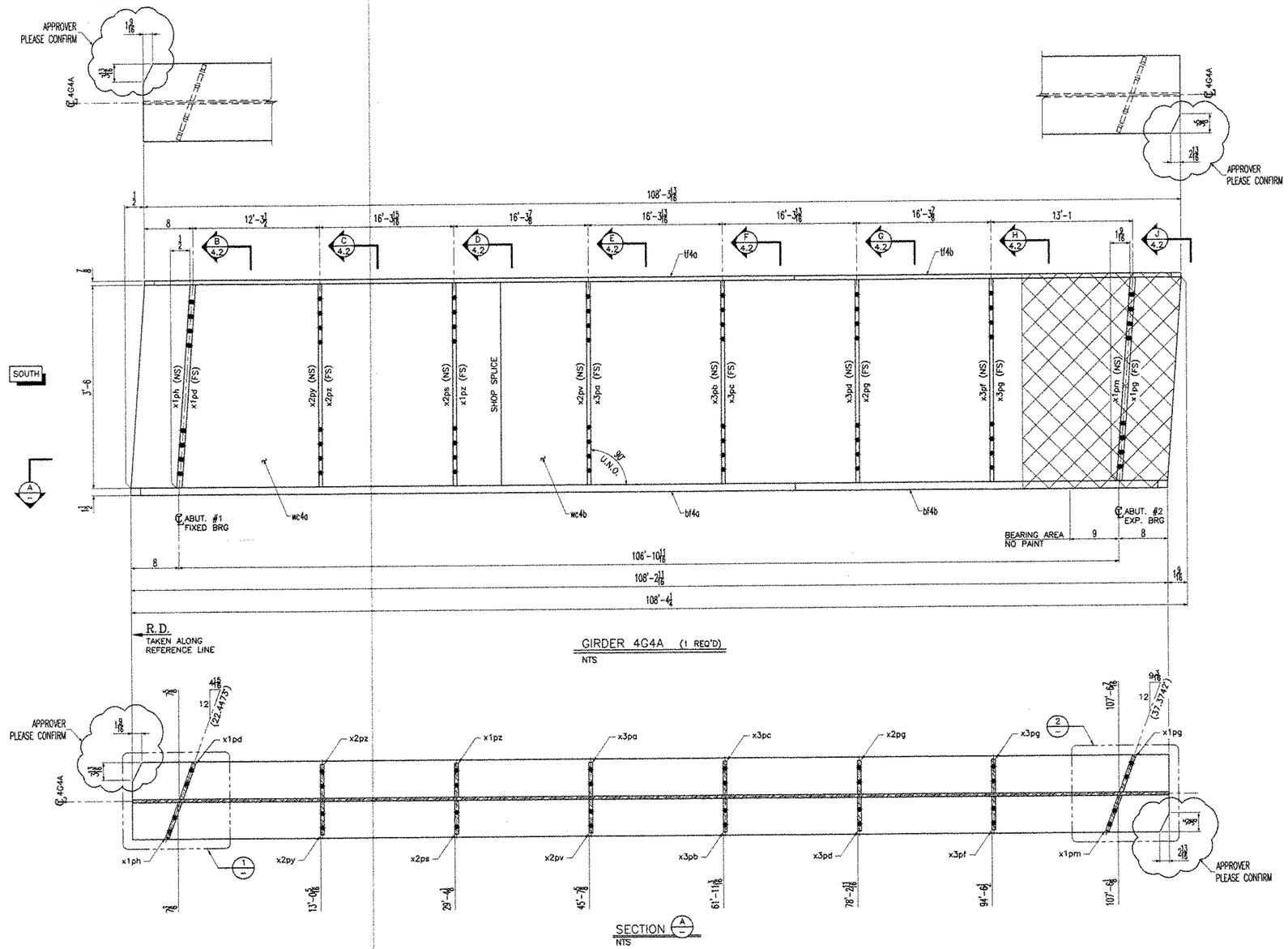
WORK WITH DRAWING 3.1

EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

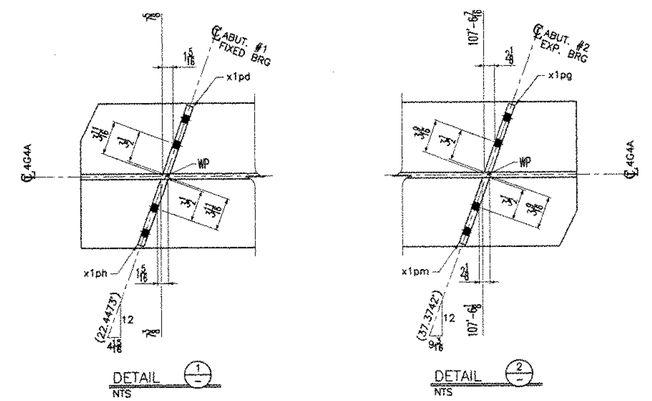
PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER
LOCATION: CHESTER, VERMONT
ENGINEER: McFARLAND-JOHNSON, INC.
CUSTOMER: EASTERN BRIDGE LLC
DRAWING TITLE: GIRDER 3G3A
DRAWN BY: D.B. 10/27/03
CHECKED BY: L.D. 11/14/03
JOB NUMBER: 4065
SHEET NUMBER: 3.2

09155




GIRDER 4G4A (1 REQ'D)
NTS

SECTION A
NTS

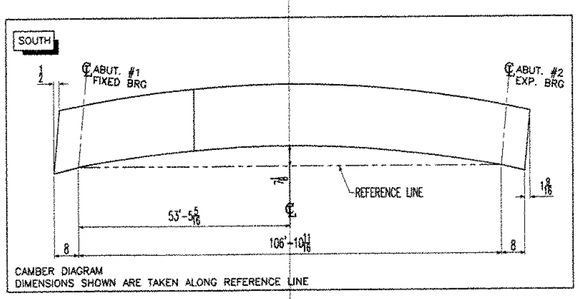



NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)
3- XXX : PAINT ZONE (SEE DRAWING GN1)

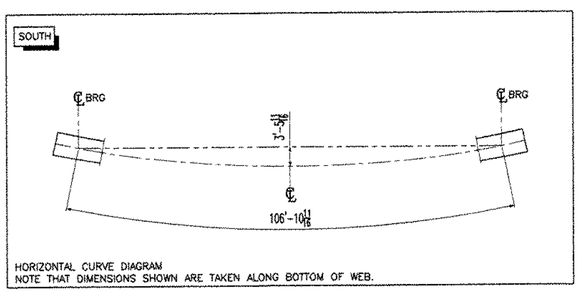
BILL OF MATERIAL

| Drawing Number | Revision Number | Ship Mark | Piece Mark | Qty | Type of Material | Size of Material | Grade | Length | Weight | Finish | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | | 4G4A | wc4a | 1 | Pl. Plate | 5/8x42 | M270-GR50W | 35'-3 7/16 | 3149 | (CVN) | 1 |
| 4 | | 4G4A | wc4b | 1 | Pl. Plate | 5/8x42 | M270-GR50W | 73'-0 13/16 | 6521 | (CVN) | 2 |
| 4 | | 4G4A | tf4a | 1 | Pl. Plate | 7/8x16 | M270-GR50W | 73'-0 7/8 | 3478 | | 4 |
| 4 | | 4G4A | tf4b | 1 | Pl. Plate | 7/8x16 | M270-GR50W | 35'-3 | 1678 | | 3 |
| 4 | | 4G4A | bf4a | 1 | Pl. Plate | 1 1/2x16 | M270-GR50W | 71'-1 1/16 | 5801 | (CVN) | 8 |
| 4 | | 4G4A | bf4b | 1 | Pl. Plate | 1 1/2x16 | M270-GR50W | 37'-1 11/16 | 3030 | (CVN) | 7 |
| 4 | | 4G4A | x1pd | 1 | Pl. Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 4 | | 4G4A | x1pg | 1 | Pl. Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 4 | | 4G4A | x1ph | 1 | Pl. Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 4 | | 4G4A | x1pm | 1 | Pl. Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 4 | | 4G4A | x1pz | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 4 | | 4G4A | x2pg | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 4 | | 4G4A | x2ps | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 4 | | 4G4A | x2pv | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 4 | | 4G4A | x2py | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 4 | | 4G4A | x2pz | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 4 | | 4G4A | x3pa | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 4 | | 4G4A | x3pb | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 4 | | 4G4A | x3pc | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 4 | | 4G4A | x3pd | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 4 | | 4G4A | x3pf | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 4 | | 4G4A | x3pg | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |

| | |
|---|---|
| TOTAL WEIGHT | 24493 |
| -CUTS | 25 |
| +FIELD BOLTS | REFER TO 'E1' DWG |
| +WELD | 139 |
| NET TOTAL | 24607 |




CAMBER DIAGRAM
DIMENSIONS SHOWN ARE TAKEN ALONG REFERENCE LINE




HORIZONTAL CURVE DIAGRAM
NOTE THAT DIMENSIONS SHOWN ARE TAKEN ALONG BOTTOM OF WEB.

WORK WITH DRAWING 4.2

NOTICE
This drawing shall not be used or reproduced in any manner, nor shall any similar drawings or structures be made therefrom, nor shall the information thereon be used for any purpose other than that for which it is released without the written consent of an officer of EASTERN BRIDGE LLC

☒ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

This review is only for general conformance with the design concept and the information expressed in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve the contractor from compliance with applicable provisions and other requirements of the Contract Documents. Review of a specific item shall not indicate approval of an assembly of which the item is a component. The Contractor is responsible for dimensions to be confirmed and correlated at the job site. Information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction, coordination of the work with that of all other trades and the performing of work in a safe and satisfactory manner.

McFarland-Johnson, Inc.
Date 12-17-03
By RSW

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:
ANEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

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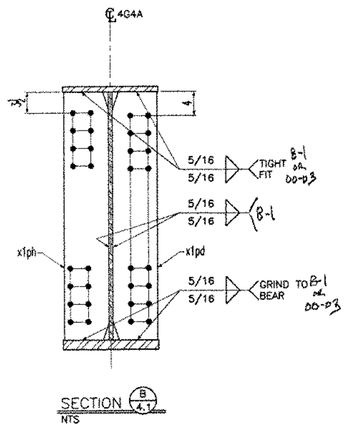
| 8 ♂ | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

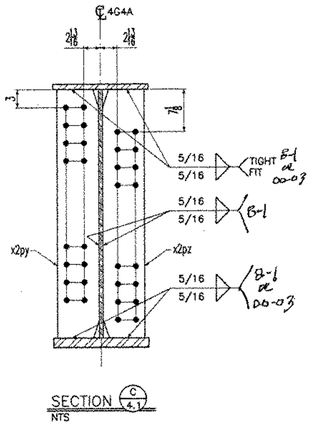
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5902

| | | | |
|---|---|---|---|
| PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER | | | |
| LOCATION: CHESTER, VERMONT | | | |
| ENGINEER: McFARLAND-JOHNSON, INC. | | | |
| CUSTOMER: EASTERN BRIDGE LLC | | | |
| DRAWING TITLE: GIRDER 4G4A | | | |
| DRAWN BY: D.B. 10/28/03 | JOB NUMBER: 4065 | SHEET NUMBER: 4.1 | |
| CHECKED BY: L.D. 11/14/03 | | | |

092 55




SECTION B 4.1
NTS




SECTION C 4.1
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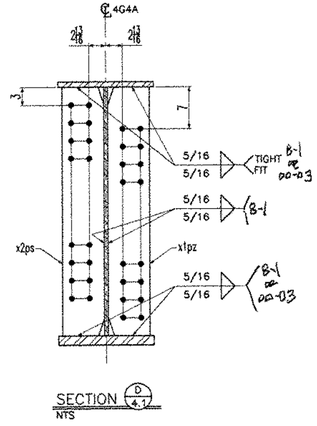


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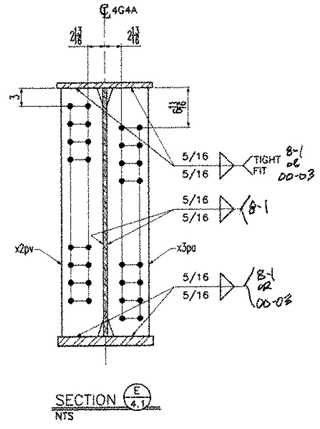


SECTION E 4.1
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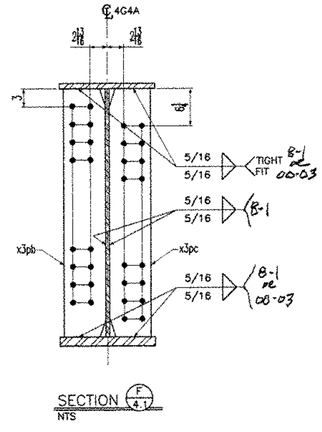
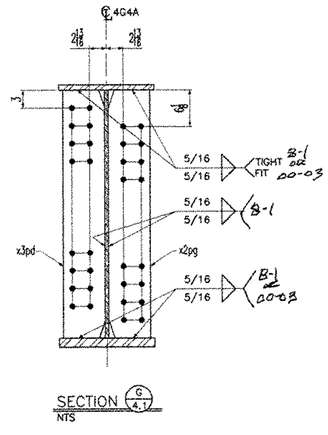



SECTION F 4.1
NTS




SECTION G 4.1
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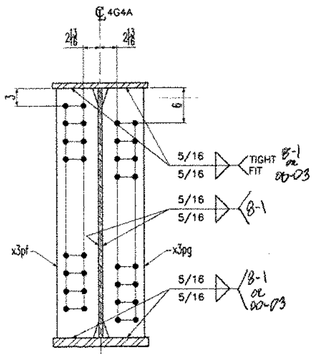
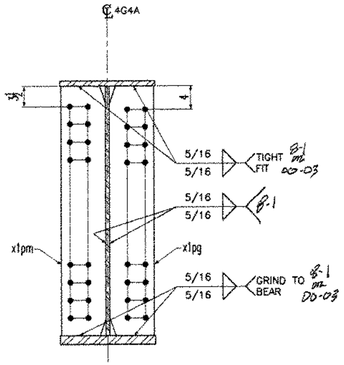



SECTION H 4.1
NTS




SECTION J 4.1
NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed ☐ Furnish as Corrected
☐ Rejected ☐ Revise and Resubmit
☐ Submit Specified Item

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McFarland-Johnson, Inc.

Date 12-17-03

By RSW

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
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| 4 | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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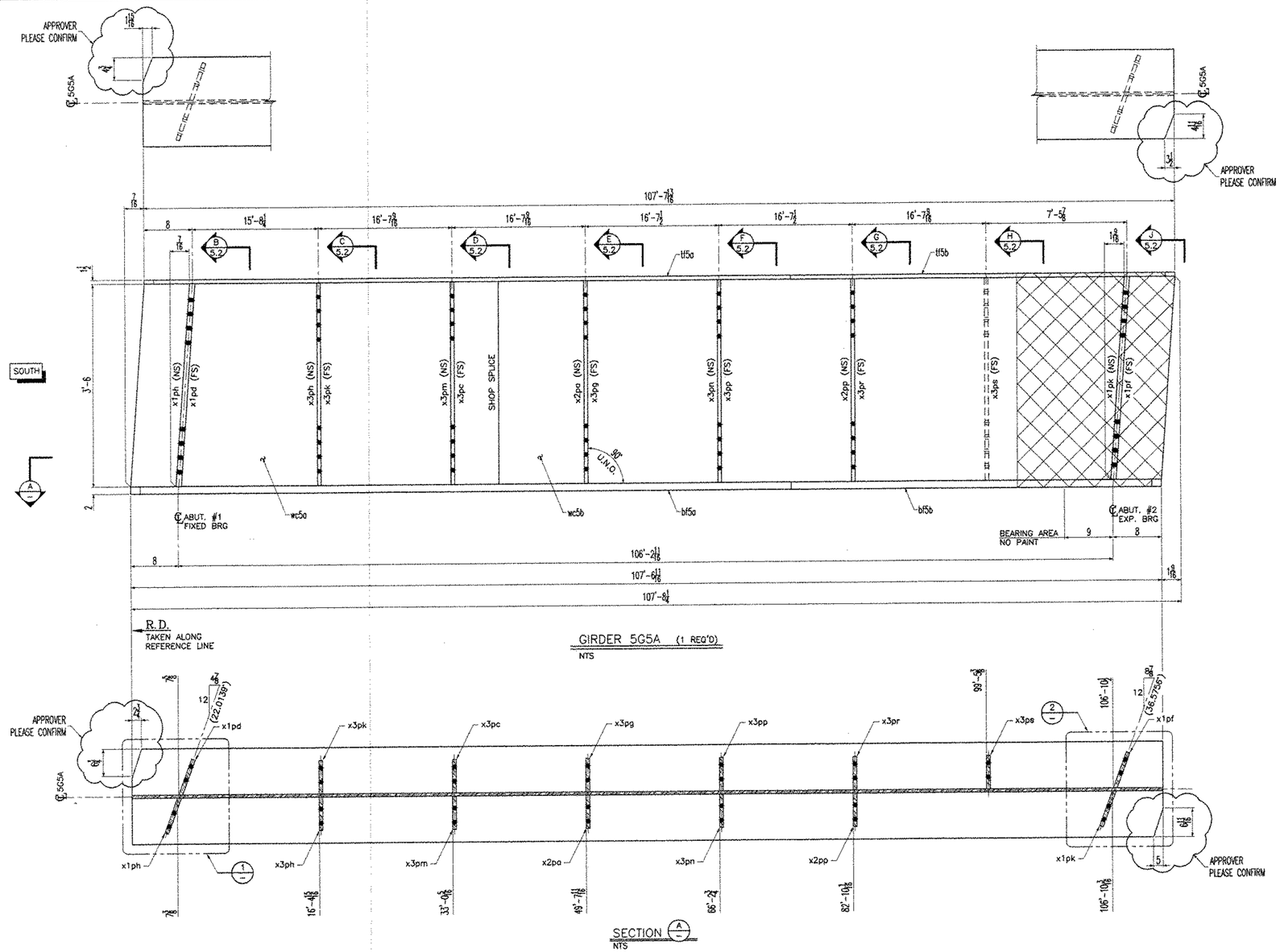
WORK WITH DRAWING 4.1

EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER
LOCATION: CHESTER, VERMONT
ENGINEER: McFARLAND-JOHNSON, INC.
CUSTOMER: EASTERN BRIDGE LLC
DRAWING TITLE: GIRDER 4G4A
DRAWN BY: D.B. 10/28/03 | JOB NUMBER: 4065 | SHEET NUMBER: 4.2
CHECKED BY: L.D. 11/14/03

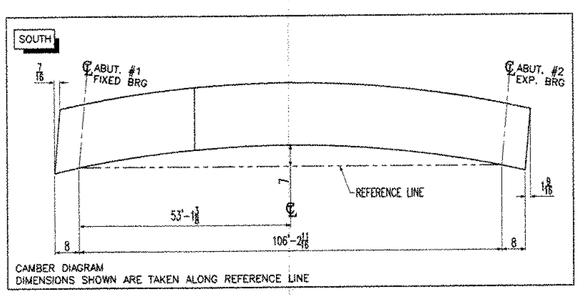
09355



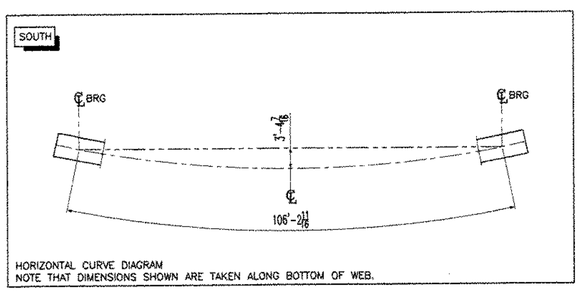

GIRDER 5G5A (1 REQ'D)
NTS



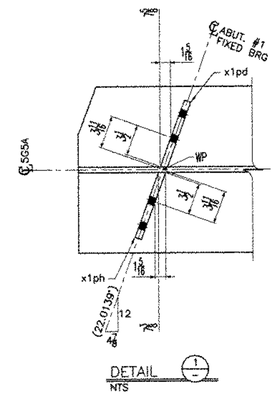

SECTION A
NTS



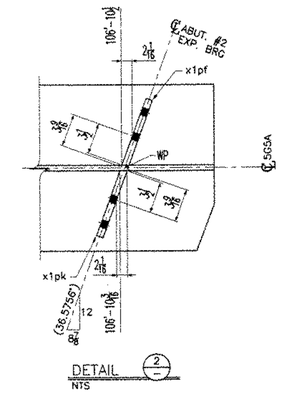

CAMBER DIAGRAM
DIMENSIONS SHOWN ARE TAKEN ALONG REFERENCE LINE




HORIZONTAL CURVE DIAGRAM
NOTE THAT DIMENSIONS SHOWN ARE TAKEN ALONG BOTTOM OF WEB.




DETAIL 1
NTS




DETAIL 2
NTS

BILL OF MATERIAL

| Drawing Number | Revision Number | Ship Mark | Piece Mark | Qty | Type of Material | Size of Material | Grade | Length | Weight | Finish | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | | 5G5A | wc5a | 1 | Pl. Plate | 5/8x42 | M270-GR50W | 35'-1 7/16 | 3134 | (CVN) | 1 |
| 5 | | 5G5A | wc5b | 1 | Pl. Plate | 5/8x42 | M270-GR50W | 72'-6 13/16 | 6477 | (CVN) | 2 |
| 5 | | 5G5A | tf5a | 1 | Pl. Plate | 1 1/2x18 | M270-GR50W | 72'-6 15/16 | 6663 | | 6 |
| 5 | | 5G5A | tf5b | 1 | Pl. Plate | 1 1/2x18 | M270-GR50W | 35'-1 | 3221 | | 5 |
| 5 | | 5G5A | bf5a | 1 | Pl. Plate | 2x22 | M270-GR50W | 70'-7 | 10559 | (CVN) | 10 |
| 5 | | 5G5A | bf5b | 1 | Pl. Plate | 2x22 | M270-GR50W | 36'-11 3/4 | 5532 | (CVN) | 9 |
| 5 | | 5G5A | x1pd | 1 | Pl. Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 5 | | 5G5A | x1pf | 1 | Pl. Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 5 | | 5G5A | x1ph | 1 | Pl. Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 5 | | 5G5A | x1pk | 1 | Pl. Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 5 | | 5G5A | x2pa | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 5 | | 5G5A | x2pp | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 5 | | 5G5A | x3pc | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 5 | | 5G5A | x3pg | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 5 | | 5G5A | x3ph | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 5 | | 5G5A | x3pk | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 5 | | 5G5A | x3pm | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 5 | | 5G5A | x3pn | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 5 | | 5G5A | x3pp | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 5 | | 5G5A | x3pr | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 5 | | 5G5A | x3ps | 1 | Pl. Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |

| | |
|---|---|
| TOTAL WEIGHT | 36380 |
| -CUTS | 32 |
| +FIELD BOLTS | REFER TO 'E1' DWG |
| +WELD | 137 |
| NET TOTAL | 36485 |

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)
3- ▨ : PAINT ZONE (SEE DRAWING GN1)

☑ Reviewed ☐ Furnish as Corrected
☐ Rejected ☐ Revise and Resubmit
☐ Submit Specified Item

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McFarland-Johnson, Inc.
Date: 12-17-03
By: RSW
RESERVED FOR STAMPS

STATE OF VERMONT — REGISTERED PROFESSIONAL ENGINEER — 11.2003

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

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| 8 | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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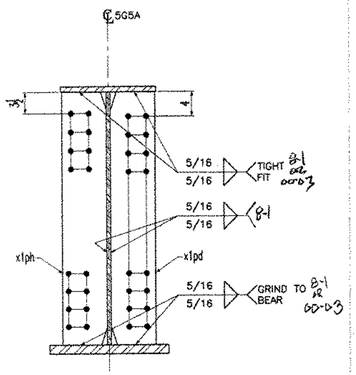
WORK WITH DRAWING 5.2

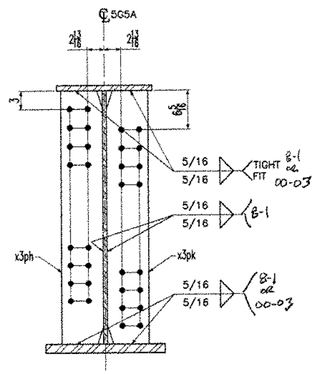
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER
LOCATION: CHESTER, VERMONT
ENGINEER: McFARLAND-JOHNSON, INC.
CUSTOMER: EASTERN BRIDGE LLC
DRAWING TITLE: GIRDER 5G5A
DRAWN BY: D.B. 10/28/03
CHECKED BY: L.D. 11/14/03
JOB NUMBER: 4065
SHEET NUMBER: 5.1

09455




SECTION B 5.1
NTS




SECTION C 5.1
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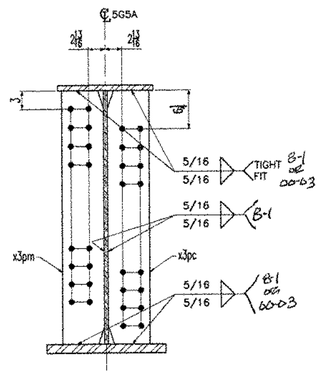


SECTION D 5.1
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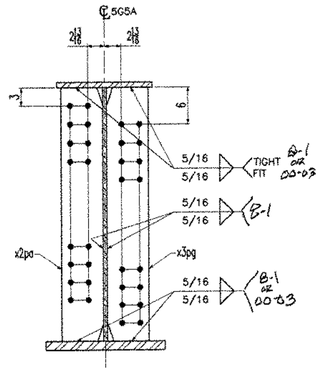


SECTION E 5.1
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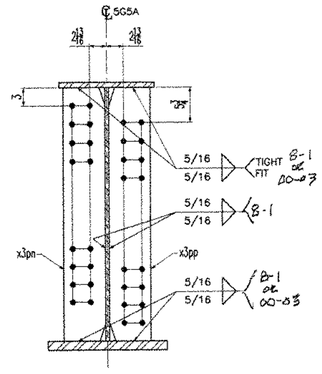


SECTION F 5.1
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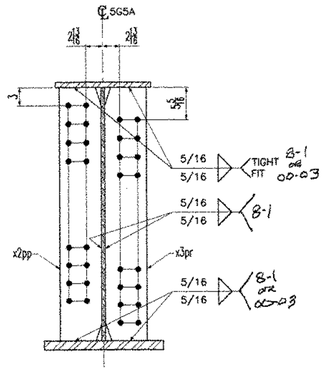


SECTION G 5.1
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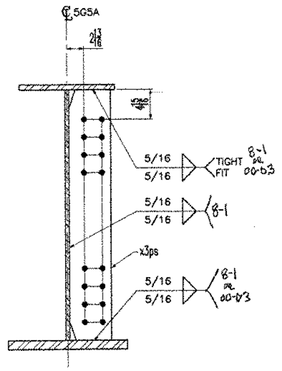


SECTION H 5.1
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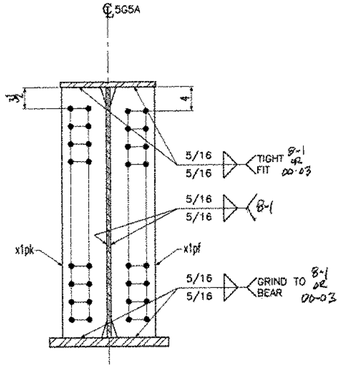


SECTION J 5.1
NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☒ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Rejected (See Remarks)

Remarks

McFarland-Johnson, Inc.

Date 12-17-03

By RSW

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

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| 8 y | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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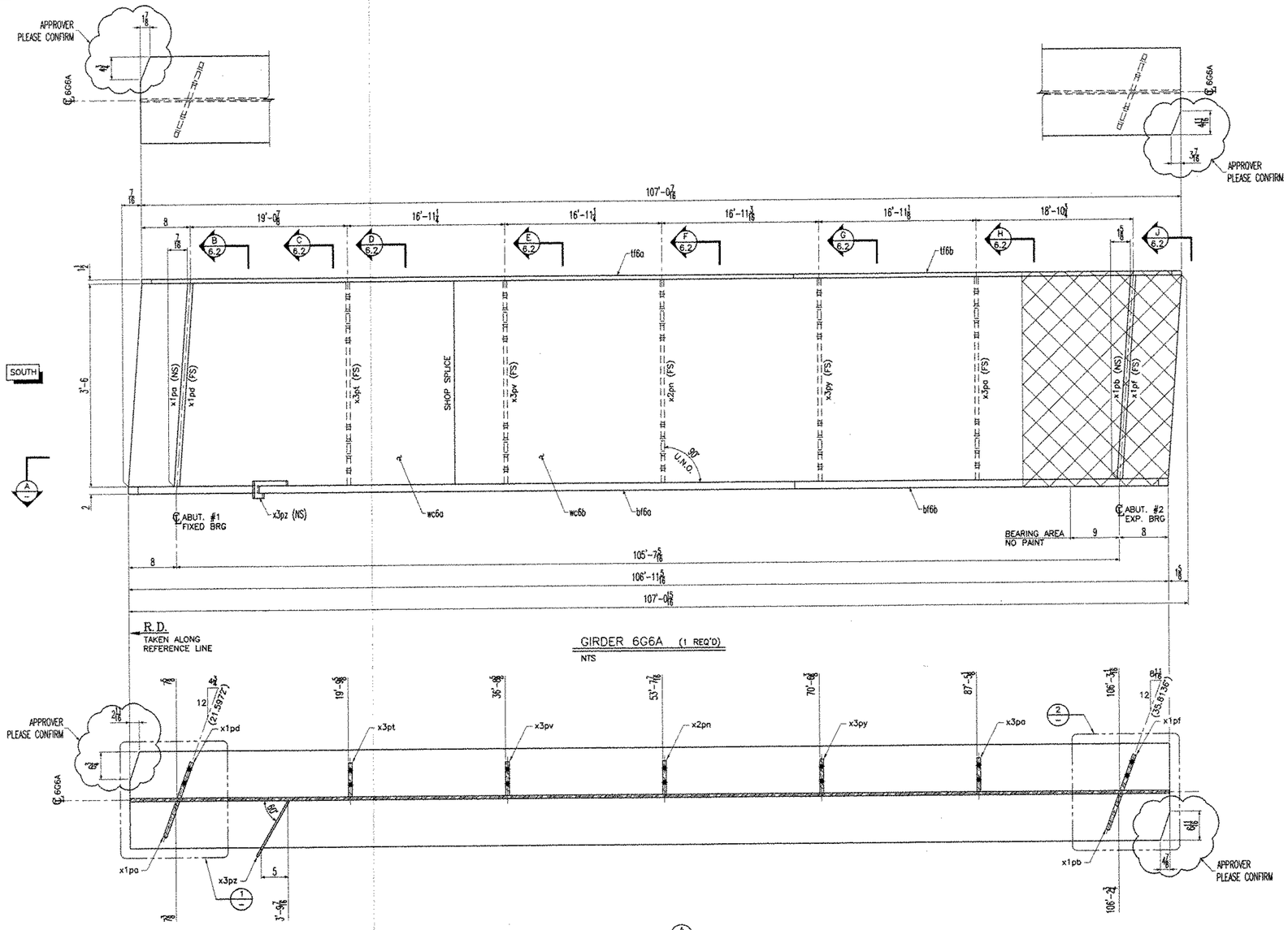
WORK WITH DRAWING 5.1

EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER
LOCATION: CHESTER, VERMONT
ENGINEER: McFARLAND-JOHNSON, INC.
CUSTOMER: EASTERN BRIDGE LLC
DRAWING TITLE: GIRDER 5G5A
DRAWN BY: D.B. 10/29/03
CHECKED BY: -
JOB NUMBER: 4065
SHEET NUMBER: 5.2

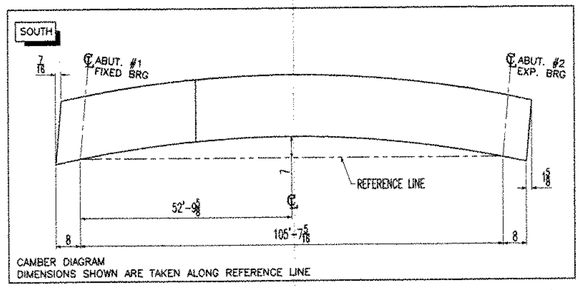
09755



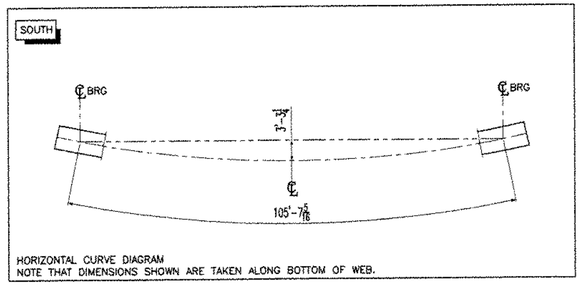

GIRDER 6G6A (1 REQ'D)
NTS



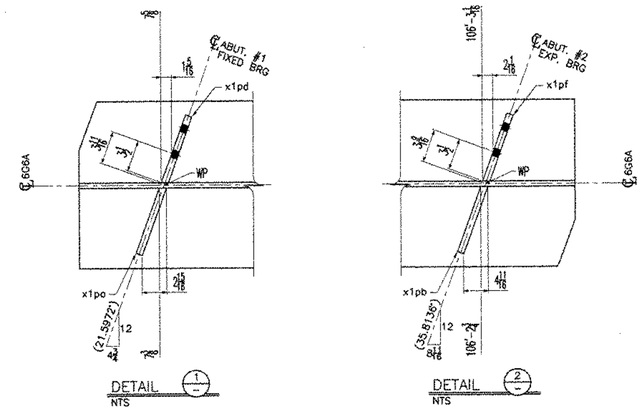

SECTION A 6.2
NTS




CAMBER DIAGRAM
DIMENSIONS SHOWN ARE TAKEN ALONG REFERENCE LINE.




HORIZONTAL CURVE DIAGRAM
NOTE THAT DIMENSIONS SHOWN ARE TAKEN ALONG BOTTOM OF WEB.




NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)
3- ⊠ : PAINT ZONE (SEE DRAWING GN1)

BILL OF MATERIAL

| Drawing Number | Revision Number | Ship Mark | Piece Mark | Qty | Type of Material | Size of Material | Grade | Length | Weight | Finish | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | | 6G6A | wc6a | 1 | PL Plate | 5/8x42 | M270-GR50W | 33'-10 3/8 | 3022 | (CVN) | 1 |
| 6 | | 6G6A | wc6b | 1 | PL Plate | 5/8x42 | M270-GR50W | 73'-2 9/16 | 6530 | (CVN) | 2 |
| 6 | | 6G6A | tf6a | 1 | PL Plate | 1 1/2x18 | M270-GR50W | 73'-2 9/16 | 6720 | | 6 |
| 6 | | 6G6A | tf6b | 1 | PL Plate | 1 1/2x18 | M270-GR50W | 33'-10 | 3105 | | 5 |
| 6 | | 6G6A | bf6a | 1 | PL Plate | 2x22 | M270-GR50W | 71'-2 5/8 | 10654 | (CVN) | 10 |
| 6 | | 6G6A | bf6b | 1 | PL Plate | 2x22 | M270-GR50W | 35'-8 3/4 | 5345 | (CVN) | 9 |
| 6 | | 6G6A | x1pa | 1 | PL Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 6 | | 6G6A | x1pb | 1 | PL Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 6 | | 6G6A | x1pd | 1 | PL Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 6 | | 6G6A | x1pf | 1 | PL Plate | 7/8x8 | M270-GR50W | 3'-6 | 83 | (CVN) | 11 |
| 6 | | 6G6A | x2pn | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 6 | | 6G6A | x3pa | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 6 | | 6G6A | x3pt | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 6 | | 6G6A | x3pv | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 6 | | 6G6A | x3py | 1 | PL Plate | 1/2x7 | M270-GR50W | 3'-6 | 42 | (CVN) | 12 |
| 6 | | 6G6A | x3pz | 1 | PL Plate | 1/4x4 | M270-GR50W | 1'-2 1/2 | 4 | | 23 |

| | |
|---|---|
| TOTAL WEIGHT | 35918 |
| -CUTS | 32 |
| +FIELD BOLTS | REFER TO 'E1' DWG |
| +WELD | 124 |
| NET TOTAL | 36010 |

☑ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

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McFarland-Johnson, Inc.
Date 12-17-03
By RSW RESERVED FOR STAMPS

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 ↑ | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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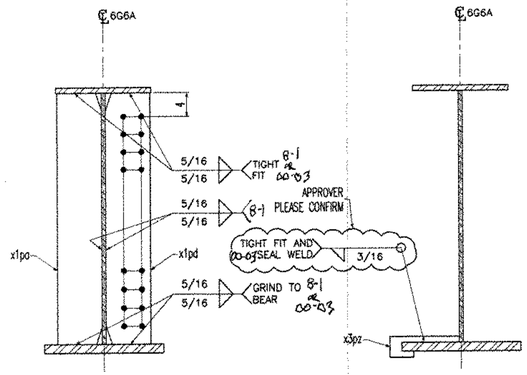
WORK WITH DRAWING 6.2

EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

| | |
|---|---|
| PROJECT: | BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER |
| LOCATION: | CHESTER, VERMONT |
| ENGINEER: | McFARLAND-JOHNSON, INC. |
| CUSTOMER: | EASTERN BRIDGE LLC |
| DRAWING TITLE: | GIRDER 6G6A |
| DRAWN BY: D.B. 10/29/03 | JOB NUMBER: 4065 |
| CHECKED BY: L.D. 11/14/03 | SHEET NUMBER: 6.1 |

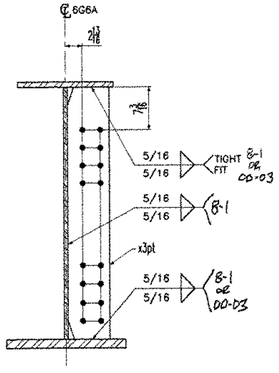
09655



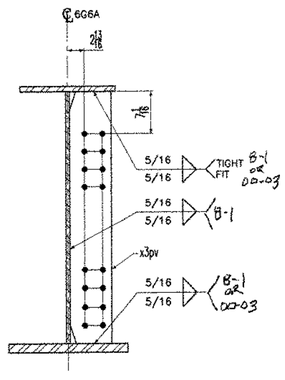

SECTION B 6.1
NTS



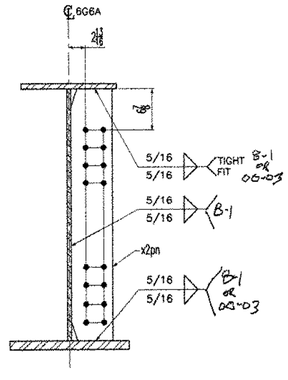

SECTION C 6.1
NTS



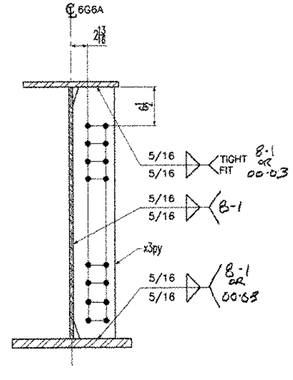

SECTION D 6.1
NTS




SECTION E 6.1
NTS




SECTION F 6.1
NTS




SECTION G 6.1
NTS

SECTION H 6.1
NTS




SECTION J 6.1
NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

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McFarland-Johnson, Inc.
Date 12-17-03
By RSW
RESERVED FOR STAMPS

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 ✗ | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER
LOCATION: CHESTER, VERMONT
ENGINEER: McFARLAND-JOHNSON, INC.
CUSTOMER: EASTERN BRIDGE LLC
DRAWING TITLE: GIRDER 6G6A
DRAWN BY: D.B. 10/29/03 | JOB NUMBER: 4065 | SHEET NUMBER: 6.2
CHECKED BY: L.D. 11/14/03

EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

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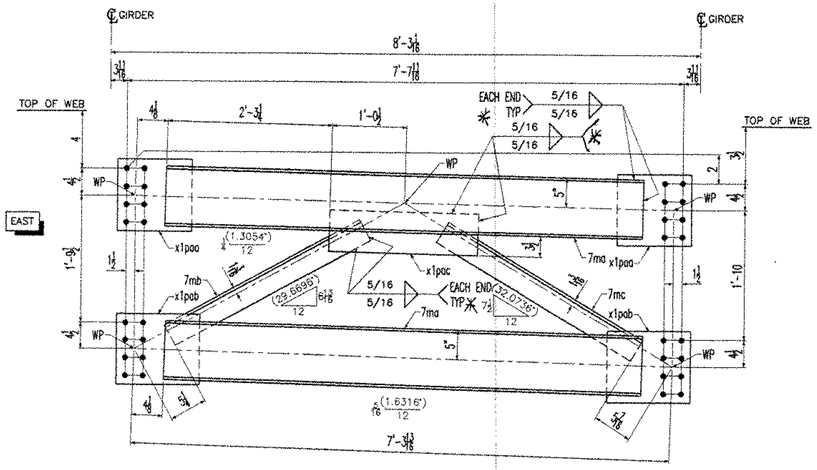
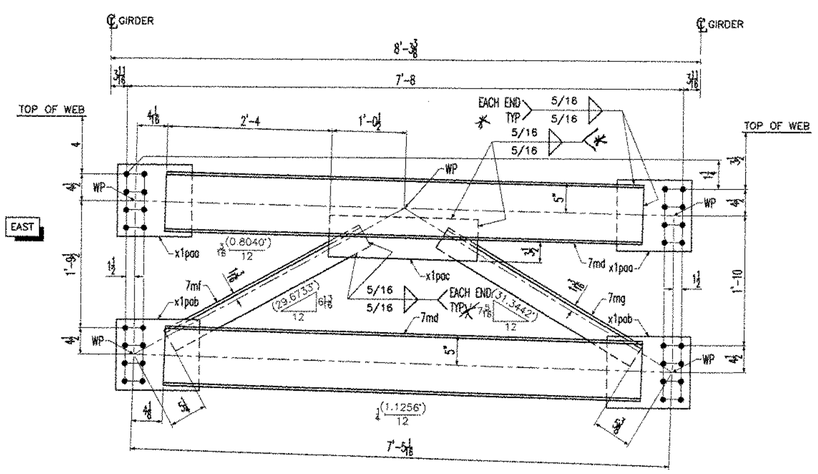
WORK WITH DRAWING 6.1

097-55




ITEM 7CF1A (1 REQ'D)
NTS




ITEM 7CF1B (1 REQ'D)
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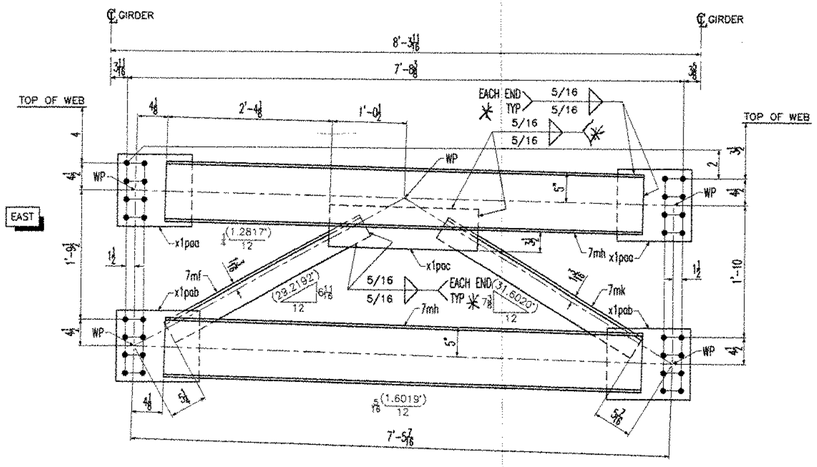


ITEM 7CF1C (1 REQ'D)
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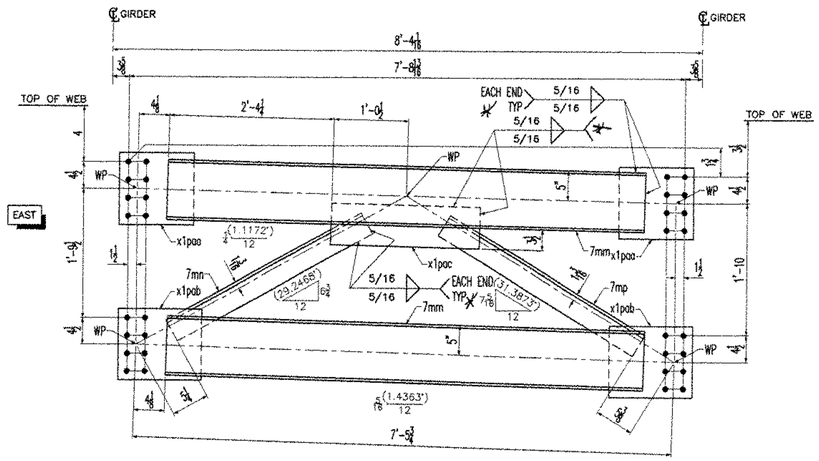


ITEM 7CF1D (1 REQ'D)
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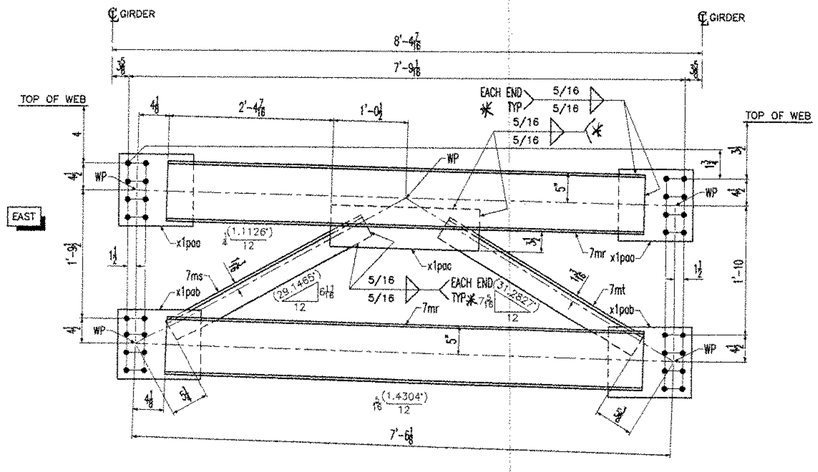


ITEM 7CF1E (1 REQ'D)
NTS

* ALL GROSS FRAME FILLET WELDS:
WPS 10-1 OR 00-03

BILL OF MATERIAL

| Drawing Number | Revision Number | Ship Mark | Place Mark | Qty | Type of Material | Size of Material | Grade | Length | Weight | Finish | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | | 7CF1A | 7ma | 2 | C Channels | 10x20 | M270M-GR50W | 6'-7 9/16 | 266 | (CVN) | 19 |
| 7 | | 7CF1A | 7mb | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-1 1/4 | 39 | (CVN) | 16 |
| 7 | | 7CF1A | 7mc | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-2 5/16 | 41 | (CVN) | 16 |
| 7 | | 7CF1A | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 7 | | 7CF1A | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 7 | | 7CF1A | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 7 | | 7CF1B | 7md | 2 | C Channels | 10x20 | M270M-GR50W | 6'-8 15/16 | 270 | (CVN) | 19 |
| 7 | | 7CF1B | 7mf | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-2 | 40 | (CVN) | 16 |
| 7 | | 7CF1B | 7mg | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-2 3/4 | 41 | (CVN) | 16 |
| 7 | | 7CF1B | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 7 | | 7CF1B | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 7 | | 7CF1B | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 7 | | 7CF1C | 7mh | 2 | C Channels | 10x20 | M270M-GR50W | 6'-9 3/16 | 271 | (CVN) | 19 |
| 7 | | 7CF1C | 7mf | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-2 | 40 | (CVN) | 16 |
| 7 | | 7CF1C | 7mk | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-3 1/16 | 41 | (CVN) | 16 |
| 7 | | 7CF1C | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 7 | | 7CF1C | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 7 | | 7CF1C | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 7 | | 7CF1D | 7mm | 2 | C Channels | 10x20 | M270M-GR50W | 6'-9 9/16 | 272 | (CVN) | 19 |
| 7 | | 7CF1D | 7mn | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-2 3/16 | 40 | (CVN) | 16 |
| 7 | | 7CF1D | 7mp | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-3 1/8 | 41 | (CVN) | 16 |
| 7 | | 7CF1D | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 7 | | 7CF1D | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 7 | | 7CF1D | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 7 | | 7CF1E | 7mr | 2 | C Channels | 10x20 | M270M-GR50W | 6'-9 15/16 | 273 | (CVN) | 19 |
| 7 | | 7CF1E | 7ms | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-2 3/8 | 41 | (CVN) | 16 |
| 7 | | 7CF1E | 7mt | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-3 5/16 | 42 | (CVN) | 16 |
| 7 | | 7CF1E | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 7 | | 7CF1E | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 7 | | 7CF1E | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |

| | |
|---|---|
| TOTAL WEIGHT | 2093 |
| -CUTS | |
| +FIELD BOLTS | REFER TO 'E' DWG |
| +WELD | 30 |
| NET TOTAL | 2123 |

(2CHEC)15-DED 2 DEMS 23 DEMS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

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McFarland-Johnson, Inc.
Date 12-17-03
By RSW
RESERVED FOR STAMPS

STATE OF VERMONT — 12.17.03

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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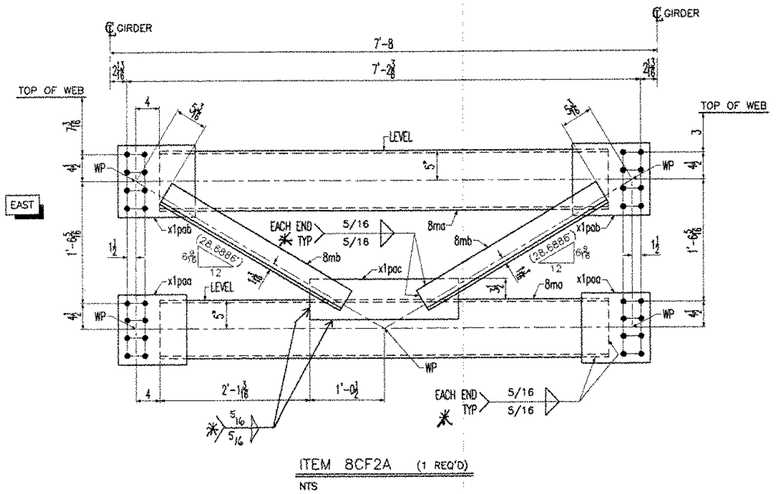
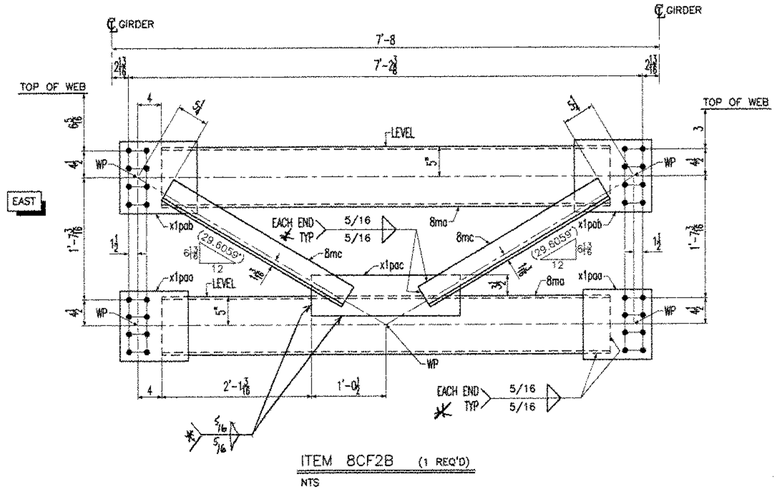
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

| | | | |
|---|---|---|---|
| PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER | | | |
| LOCATION: CHESTER, VERMONT | | | |
| ENGINEER: McFARLAND-JOHNSON, INC. | | | |
| CUSTOMER: EASTERN BRIDGE LLC | | | |
| DRAWING TITLE: ABUTMENT CROSS FRAMES | | | |
| DRAWN BY: D.B. | 10/31/03 | JOB NUMBER: 4065 | SHEET NUMBER: 7 |
| CHECKED BY: L.D. | 11/14/03 | | |

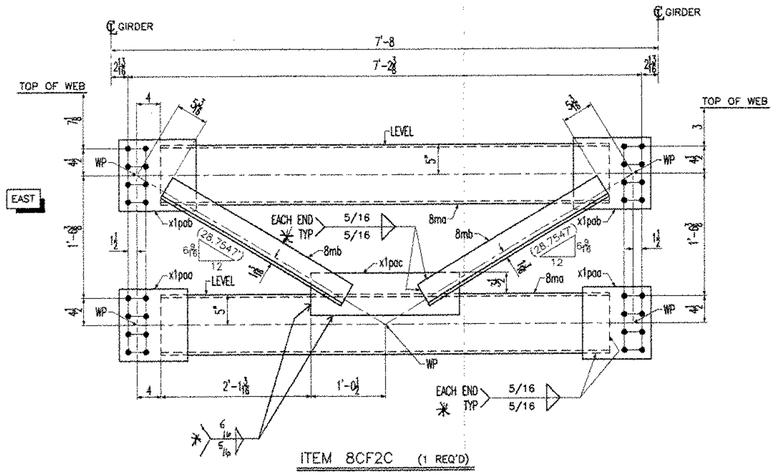
09855



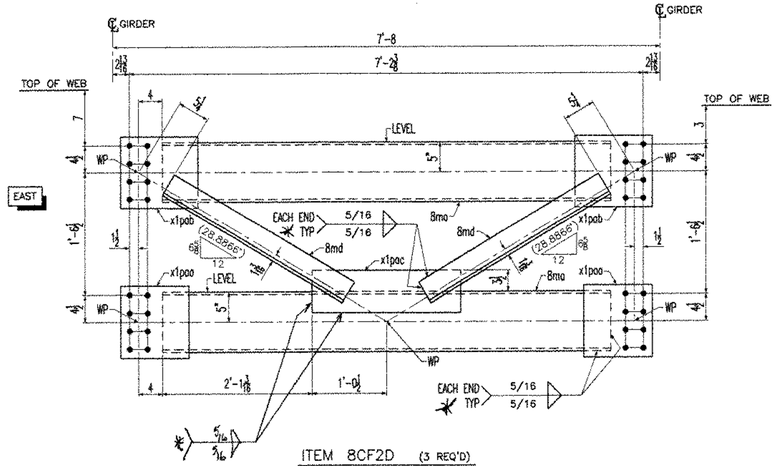

ITEM 8CF2A (1 REQ'D)
NTS




ITEM 8CF2B (1 REQ'D)
NTS




ITEM 8CF2C (1 REQ'D)
NTS




ITEM 8CF2D (3 REQ'D)
NTS

*ALL CROSSFRAME FILLET WELDS:
WPS 10-1 OR 00-03

BILL OF MATERIAL

| Drawing Number | Revision Number | Ship Mark | Piece Mark | Qty | Type of Material | Size of Material | Grade | Length | Weight | Finish | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | | 8CF2A | 8ma | 2 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 251 | (CVN) | 18 |
| 8 | | 8CF2A | 8mb | 2 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 5/16 | 73 | (CVN) | 15 |
| 8 | | 8CF2A | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 8 | | 8CF2A | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 8 | | 8CF2A | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 8 | | 8CF2B | 8ma | 2 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 251 | (CVN) | 18 |
| 8 | | 8CF2B | 8mc | 2 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 11/16 | 73 | (CVN) | 15 |
| 8 | | 8CF2B | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 8 | | 8CF2B | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 8 | | 8CF2B | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 8 | | 8CF2C | 8ma | 2 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 251 | (CVN) | 18 |
| 8 | | 8CF2C | 8mb | 2 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 5/16 | 73 | (CVN) | 15 |
| 8 | | 8CF2C | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 8 | | 8CF2C | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 8 | | 8CF2C | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 8 | | 8CF2D | 8ma | 6 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 753 | (CVN) | 18 |
| 8 | | 8CF2D | 8md | 6 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 3/8 | 219 | (CVN) | 15 |
| 8 | | 8CF2D | x1paa | 6 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 60 | (CVN) | 14 |
| 8 | | 8CF2D | x1pab | 6 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 66 | (CVN) | 14 |
| 8 | | 8CF2D | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |

| | |
|---|---|
| TOTAL WEIGHT | 2346 |
| -CUTS | |
| +FIELD BOLTS | REFER TO 'E' DWG |
| +WELD | 36 |
| NET TOTAL | 2382 |

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

This review is only for general conformance with the design concept of the project and general compliance with the Contract Documents. Contractor is responsible for dimensions to be confirmed and correlated at the jobsite. Information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction (including safety precautions and programs) is the responsibility of the Contractor. The review of a separate item as such does not indicate approval of the assembly in which the item functions. The Contractor is responsible for performing all work in a safe and satisfactory manner.

McFarland-Johnson, Inc.
Date 12-17-03
By RSW
RESERVED FOR STAMPS

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
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| | | |
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| | | | |
| | | | |
| 8 X | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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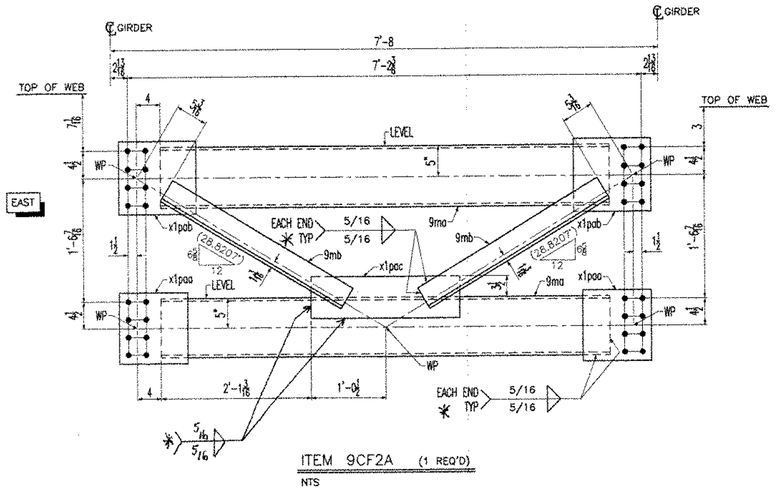
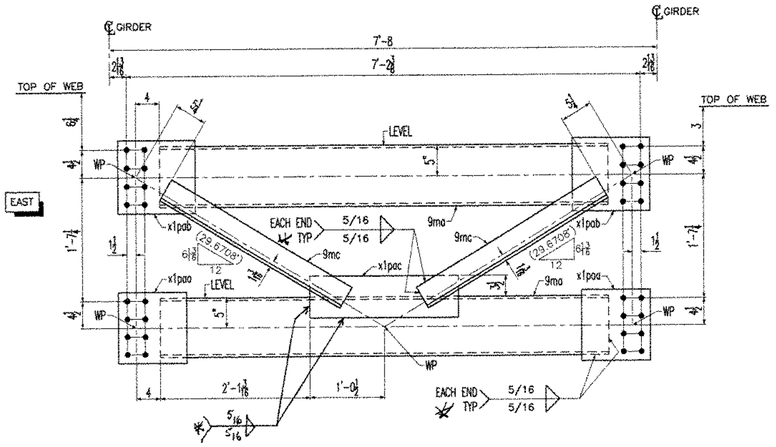
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

| | |
|---|---|
| PROJECT: | BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER |
| LOCATION: | CHESTER, VERMONT |
| ENGINEER: | McFARLAND-JOHNSON, INC. |
| CUSTOMER: | EASTERN BRIDGE LLC |
| DRAWING TITLE: | INTERMEDIATE CROSS FRAMES |
| DRAWN BY: D.B. 10/31/03 | JOB NUMBER: 4065 |
| CHECKED BY: L.D. 11/14/03 | SHEET NUMBER: 8 |

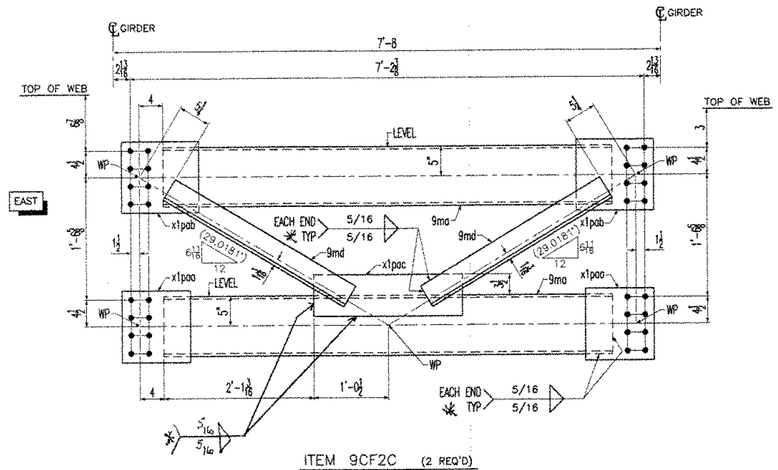
09955



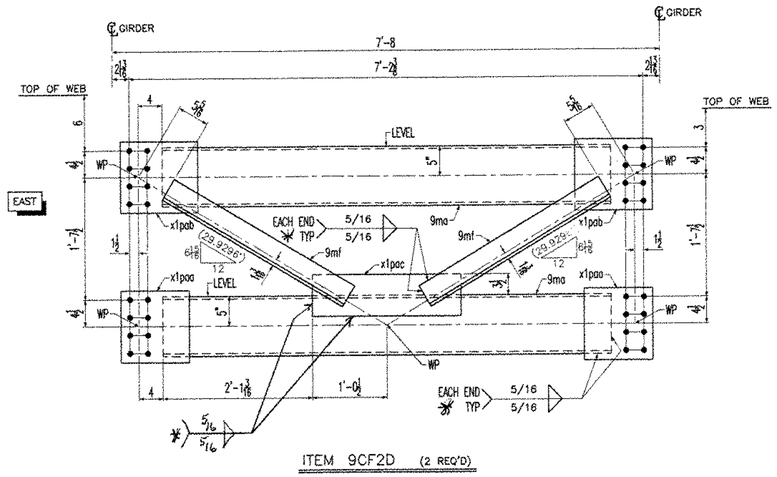

ITEM 9CF2A (1 REQ'D)
NTS




ITEM 9CF2B (2 REQ'D)
NTS




ITEM 9CF2C (2 REQ'D)
NTS




ITEM 9CF2D (2 REQ'D)
NTS

*ALL CROSSFRAME FILLET WELDS:
WPS 10-1 OR 00-03

## BILL OF MATERIAL

| Drawing Number | Revision Number | Ship Mark | Piece Mark | Qty | Type of Material | Size of Material | Grade | Length | Weight | Finish | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | | 9CF2A | 9ma | 2 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 251 | (CVN) | 18 |
| 9 | | 9CF2A | 9mb | 2 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 3/8 | 73 | (CVN) | 15 |
| 9 | | 9CF2A | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 9 | | 9CF2A | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 9 | | 9CF2A | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 9 | | 9CF2B | 9ma | 4 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 502 | (CVN) | 18 |
| 9 | | 9CF2B | 9mc | 4 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 11/16 | 147 | (CVN) | 15 |
| 9 | | 9CF2B | x1paa | 4 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 40 | (CVN) | 14 |
| 9 | | 9CF2B | x1pab | 4 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 44 | (CVN) | 14 |
| 9 | | 9CF2B | x1pac | 2 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 50 | (CVN) | 13 |
| 9 | | 9CF2C | 9ma | 4 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 502 | (CVN) | 18 |
| 9 | | 9CF2C | 9md | 4 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 7/16 | 146 | (CVN) | 15 |
| 9 | | 9CF2C | x1paa | 4 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 40 | (CVN) | 14 |
| 9 | | 9CF2C | x1pab | 4 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 44 | (CVN) | 14 |
| 9 | | 9CF2C | x1pac | 2 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 50 | (CVN) | 13 |
| 9 | | 9CF2D | 9ma | 4 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 502 | (CVN) | 18 |
| 9 | | 9CF2D | 9mf | 4 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 13/16 | 147 | (CVN) | 15 |
| 9 | | 9CF2D | x1paa | 4 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 40 | (CVN) | 14 |
| 9 | | 9CF2D | x1pab | 4 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 44 | (CVN) | 14 |
| 9 | | 9CF2D | x1pac | 2 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 50 | (CVN) | 13 |

| | |
|---|---|
| TOTAL WEIGHT | 2739 |
| -CUTS | |
| +FIELD BOLTS | REFER TO 'E' DWG |
| +WELD | 42 |
| NET TOTAL | 2781 |

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

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McFarland-Johnson, Inc.
Date 12-17-03
By RSW
RESERVED FOR STAMPS

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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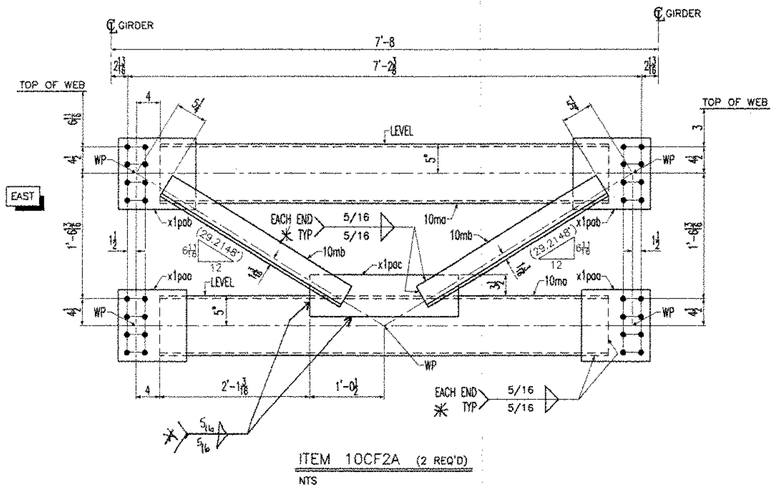
This drawing shall not be used or reproduced in any manner, nor shall any similar drawings or structures be made therefrom, nor shall the information thereon be used for any purpose other than that for which it is released without the written consent of an officer of EASTERN BRIDGE LLC.

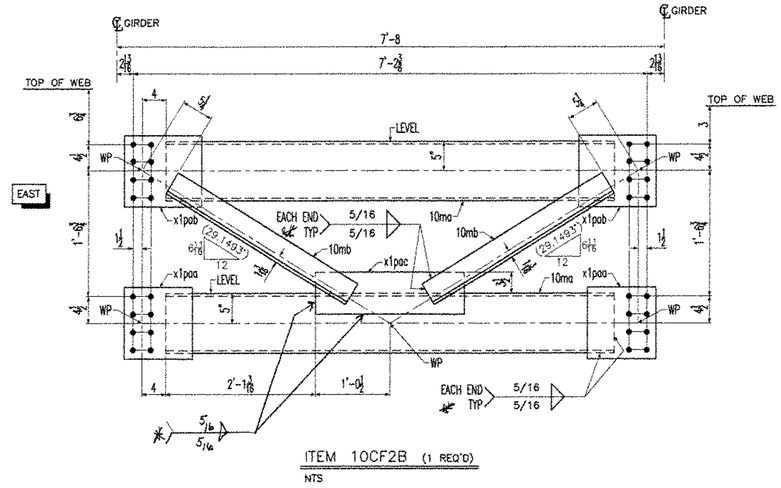
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

| | | | |
|---|---|---|---|
| PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER | | | |
| LOCATION: CHESTER, VERMONT | | | |
| ENGINEER: McFARLAND-JOHNSON, INC. | | | |
| CUSTOMER: EASTERN BRIDGE LLC | | | |
| DRAWING TITLE: INTERMEDIATE CROSS FRAMES | | | |
| DRAWN BY: D.B. 10/31/03 | JOB NUMBER: 4065 | | SHEET NUMBER: 9 |
| CHECKED BY: L.D. 11/14/03 | | | |

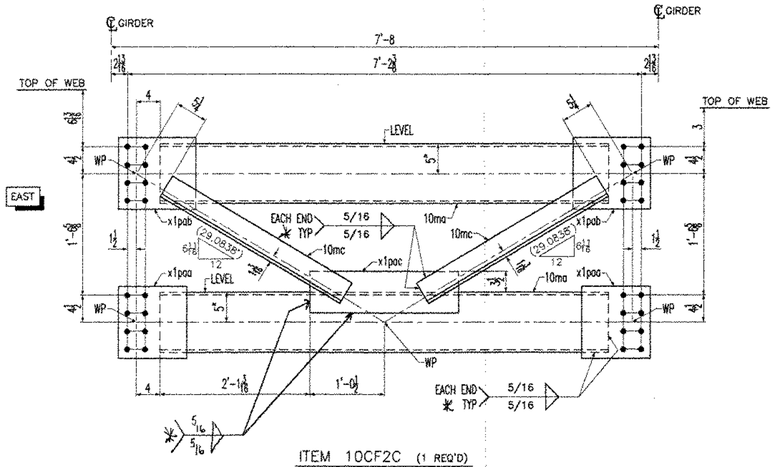
10056



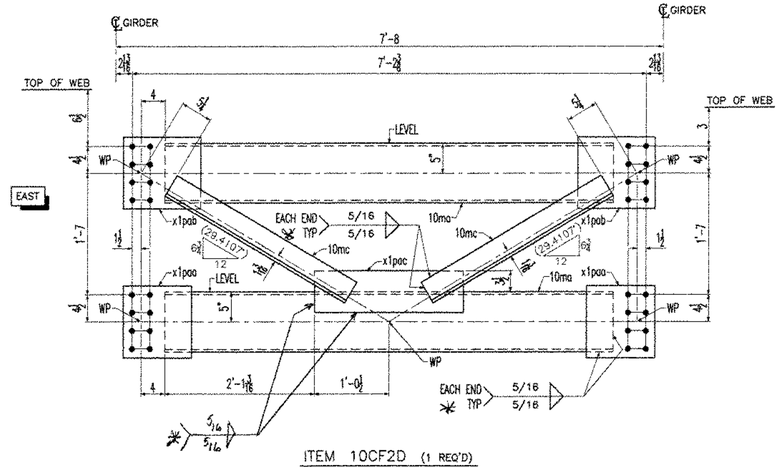

ITEM 10CF2A (2 REQ'D)
NTS




ITEM 10CF2B (1 REQ'D)
NTS




ITEM 10CF2C (1 REQ'D)
NTS




ITEM 10CF2D (1 REQ'D)
NTS

✱ ALL CROSSFRAME FILLET WELDS:
WPS 10-1 OR 00-03

BILL OF MATERIAL

| Drawing Number | Revision Number | Ship Mark | Piece Mark | Qty | Type of Material | Size of Material | Grade | Length | Weight | Finish | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | | 10CF2A | 10ma | 4 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 502 | (CVN) | 18 |
| 10 | | 10CF2A | 10mb | 4 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 1/2 | 73 | (CVN) | 15 |
| 10 | | 10CF2A | x1paa | 4 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 40 | (CVN) | 14 |
| 10 | | 10CF2A | x1pab | 4 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 44 | (CVN) | 14 |
| 10 | | 10CF2A | x1pac | 2 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 50 | (CVN) | 13 |
| 10 | | 10CF2B | 10ma | 2 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 251 | (CVN) | 18 |
| 10 | | 10CF2B | 10mb | 2 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 1/2 | 73 | (CVN) | 15 |
| 10 | | 10CF2B | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 10 | | 10CF2B | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 10 | | 10CF2B | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 10 | | 10CF2C | 10ma | 2 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 251 | (CVN) | 18 |
| 10 | | 10CF2C | 10mc | 2 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 7/16 | 75 | (CVN) | 15 |
| 10 | | 10CF2C | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 10 | | 10CF2C | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 10 | | 10CF2C | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 10 | | 10CF2D | 10ma | 2 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 251 | (CVN) | 18 |
| 10 | | 10CF2D | 10mc | 2 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 5/8 | 75 | (CVN) | 15 |
| 10 | | 10CF2D | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 10 | | 10CF2D | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 10 | | 10CF2D | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |

| | |
|---|---|
| TOTAL WEIGHT | 1886 |
| -CUTS | |
| +FIELD BOLTS | REFER TO 'E' DWG |
| +WELD | 30 |
| NET TOTAL | 1916 |

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed ☐ Furnish as Corrected
☐ Rejected ☐ Revise and Resubmit
☐ Submit Specified Item

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McFarland-Johnson, Inc.
Date 12-17-03
By RSW

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 ↑ | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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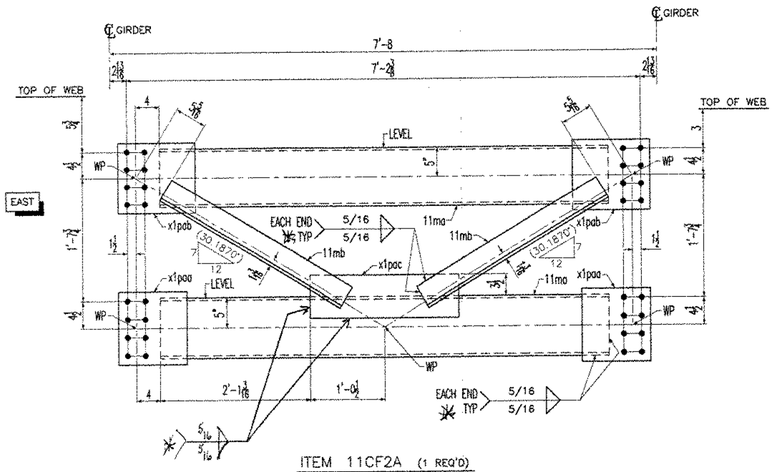
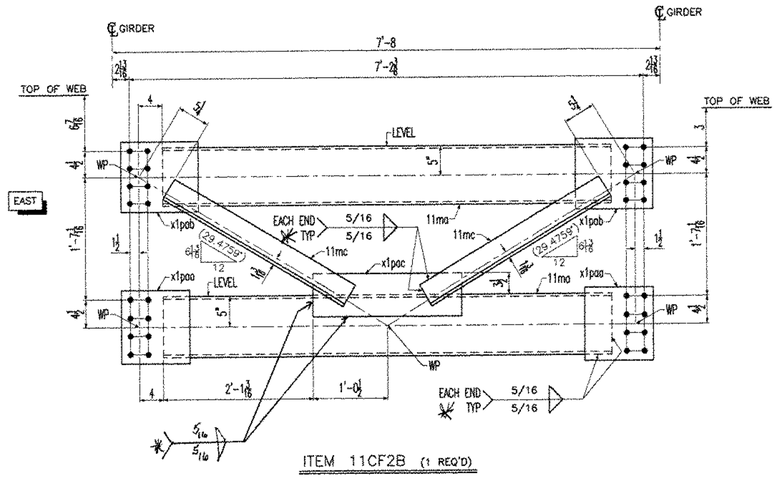
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

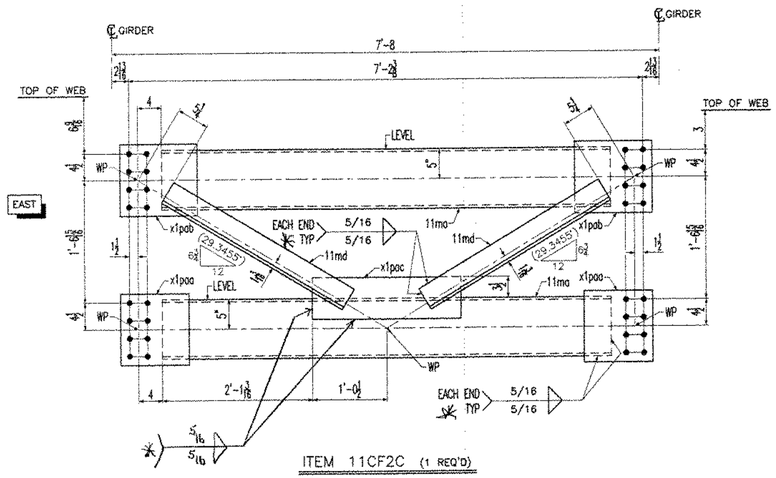
| | | | |
|---|---|---|---|
| PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER | | | |
| LOCATION: CHESTER, VERMONT | | | |
| ENGINEER: McFARLAND-JOHNSON, INC. | | | |
| CUSTOMER: EASTERN BRIDGE LLC | | | |
| DRAWING TITLE: INTERMEDIATE CROSS FRAMES | | | |
| DRAWN BY: D.B. 10/31/03 | JOB NUMBER: 4065 | SHEET NUMBER: 10 | |
| CHECKED BY: L.D. 11/14/03 | | | |



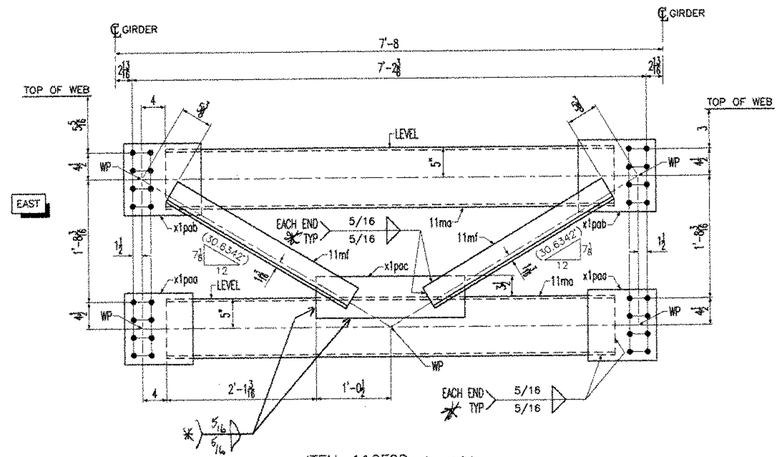

ITEM 11CF2A (1 REQ'D)
NTS




ITEM 11CF2B (1 REQ'D)
NTS




ITEM 11CF2C (1 REQ'D)
NTS




ITEM 11CF2D (1 REQ'D)
NTS

* ALL CROSSFRAME FILLET WELDS:
WDS 10-1 OR 00-03

## BILL OF MATERIAL

| Drawing Number | Revision Number | Ship Mark | Piece Mark | Qty | Type of Material | Size of Material | Grade | Length | Weight | Finish | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | | 11CF2A | 11ma | 2 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 251 | (CVN) | 18 |
| 11 | | 11CF2A | 11mb | 2 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 15/16 | 73 | (CVN) | 15 |
| 11 | | 11CF2A | x1paa | 2 | Pl. Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 11 | | 11CF2A | x1pab | 2 | Pl. Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 11 | | 11CF2A | x1pac | 1 | Pl. Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 11 | | 11CF2B | 11ma | 2 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 251 | (CVN) | 18 |
| 11 | | 11CF2B | 11mc | 2 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 5/8 | 73 | (CVN) | 15 |
| 11 | | 11CF2B | x1paa | 2 | Pl. Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 11 | | 11CF2B | x1pab | 2 | Pl. Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 11 | | 11CF2B | x1pac | 1 | Pl. Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 11 | | 11CF2C | 11ma | 2 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 251 | (CVN) | 18 |
| 11 | | 11CF2C | 11md | 2 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 9/16 | 73 | (CVN) | 15 |
| 11 | | 11CF2C | x1paa | 2 | Pl. Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 11 | | 11CF2C | x1pab | 2 | Pl. Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 11 | | 11CF2C | x1pac | 1 | Pl. Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 11 | | 11CF2D | 11ma | 2 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 251 | (CVN) | 18 |
| 11 | | 11CF2D | 11mf | 2 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-11 1/8 | 73 | (CVN) | 15 |
| 11 | | 11CF2D | x1paa | 2 | Pl. Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 11 | | 11CF2D | x1pab | 2 | Pl. Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 11 | | 11CF2D | x1pac | 1 | Pl. Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |

| | |
|---|---|
| TOTAL WEIGHT | 1564 |
| -CUTS | |
| +FIELD BOLTS | REFER TO 'E' DWG |
| +WELD | 24 |
| NET TOTAL | 1588 |

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and [illegible]
☐ Submit Spec. [illegible]

This review is for general conformance with the design concept of the project and general compliance with information given in the Contract Documents. Contractor is responsible for dimensions to be confirmed and correlated at the jobsite; for information that pertains solely to the fabrication processes of the Contractor, such as connections, procedures, techniques and for the satisfactory performance of his work. Approval does not relieve the Contractor of responsibility for errors or omissions in the Shop Drawings or for compliance with all other requirements of the Contract Documents.

McFarland-Johnson, Inc.
Date: ~~RSW~~ 12-17-03
By: RSW

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 ✓ | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

NOTICE
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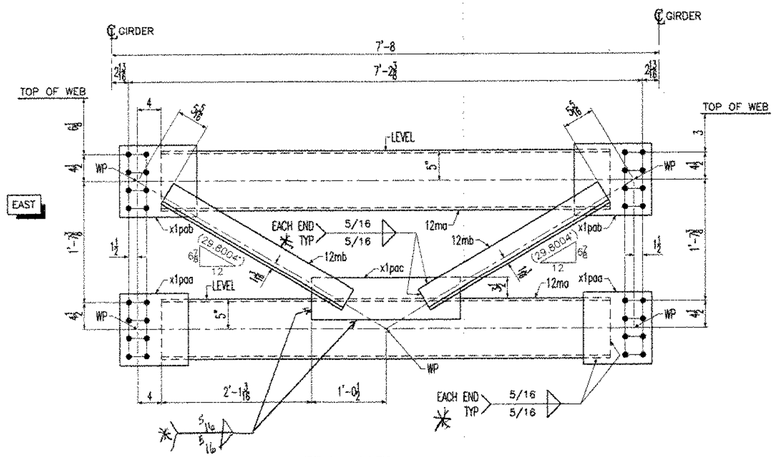
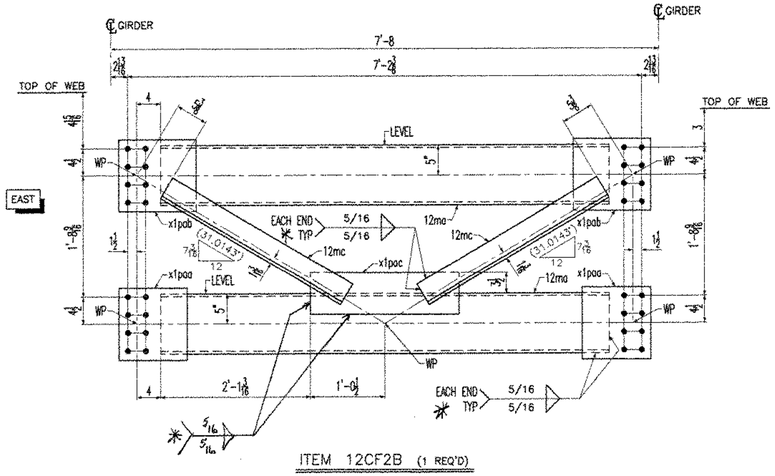
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER
LOCATION: CHESTER, VERMONT
ENGINEER: McFARLAND-JOHNSON, INC.
CUSTOMER: EASTERN BRIDGE LLC
DRAWING TITLE: INTERMEDIATE CROSS FRAMES
DRAWN BY: D.B. 10/31/03
CHECKED BY: L.D. 11/14/03
JOB NUMBER: 4065
SHEET NUMBER: 11

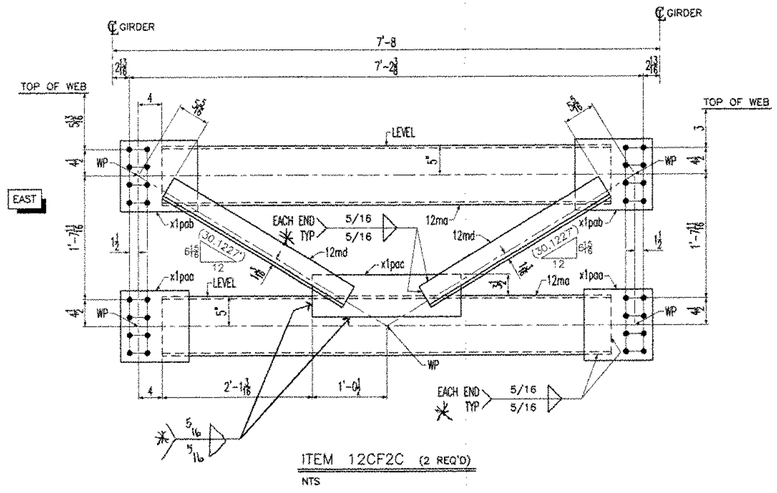
10255



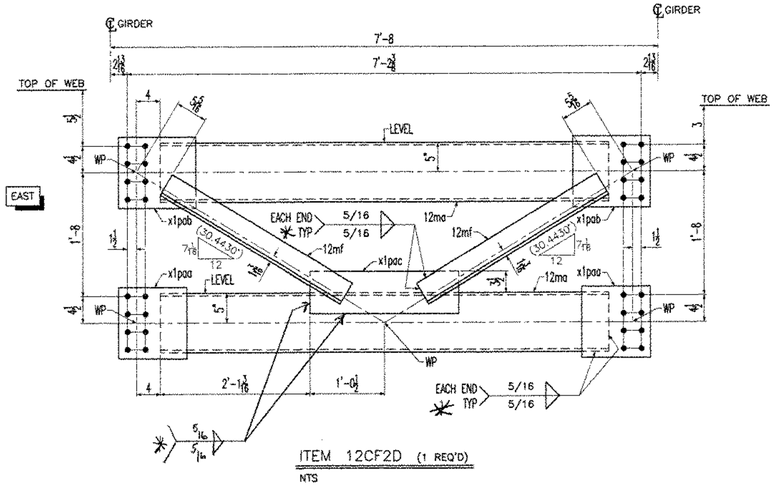

ITEM 12CF2A (3 REQ'D)
NTS




ITEM 12CF2B (1 REQ'D)
NTS




ITEM 12CF2C (2 REQ'D)
NTS




ITEM 12CF2D (1 REQ'D)
NTS

* ALL CROSSFRAME FILLET WELDS:
WPS 10-1 OR 00-03

BILL OF MATERIAL

| Drawing Number | Revision Number | Ship Mark | Piece Mark | Qty | Type of Material | Size of Material | Grade | Length | Weight | Finish | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | | 12CF2A | 12ma | 6 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 753 | (CVN) | 18 |
| 12 | | 12CF2A | 12mb | 6 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 3/4 | 221 | (CVN) | 15 |
| 12 | | 12CF2A | x1paa | 6 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 60 | (CVN) | 14 |
| 12 | | 12CF2A | x1pab | 6 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 66 | (CVN) | 14 |
| 12 | | 12CF2A | x1pac | 3 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 75 | (CVN) | 13 |
| 12 | | 12CF2B | 12ma | 2 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 251 | (CVN) | 18 |
| 12 | | 12CF2B | 12mc | 2 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-11 1/4 | 75 | (CVN) | 15 |
| 12 | | 12CF2B | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 12 | | 12CF2B | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 12 | | 12CF2B | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 12 | | 12CF2C | 12ma | 4 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 502 | (CVN) | 18 |
| 12 | | 12CF2C | 12md | 4 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-10 7/8 | 148 | (CVN) | 15 |
| 12 | | 12CF2C | x1paa | 4 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 40 | (CVN) | 14 |
| 12 | | 12CF2C | x1pab | 4 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 44 | (CVN) | 14 |
| 12 | | 12CF2C | x1pac | 2 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 50 | (CVN) | 13 |
| 12 | | 12CF2D | 12ma | 2 | C Channels | 10x20 | M270M-GR50W | 6'-3 3/8 | 251 | (CVN) | 18 |
| 12 | | 12CF2D | 12mf | 2 | L Angles | 4x4x1/2 | M270M-GR50W | 2'-11 | 74 | (CVN) | 15 |
| 12 | | 12CF2D | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 12 | | 12CF2D | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 12 | | 12CF2D | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |

| | |
|---|---|
| TOTAL WEIGHT | 2744 |
| -CUTS | |
| +FIELD BOLTS | REFER TO 'E' DWG |
| +WELD | 42 |
| NET TOTAL | 2786 |

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

This review is only for general conformance with the contract documents. It does not indicate a complete review of all Construction Documents. Corrections or comments made on the shop drawings during this review do not relieve the contractor from compliance with the requirements of the plans and specifications. Review of the shop drawings shall not include review of the accuracy of which the item is a part. The contractor is responsible for: dimensions to be confirmed and correlated at the jobsite; information that pertains solely to the fabrication process or to the means, methods, techniques, sequences and procedures of construction; coordination of the work with that of all other trades and performing all work in a safe and satisfactory manner.

by: Howard-Johnson, Inc.
Date: 12-17-03
By: RSW

RESERVED FOR STAMPS

EASTERN BRIDGE LLC
APPROVED
12/17/03

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
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| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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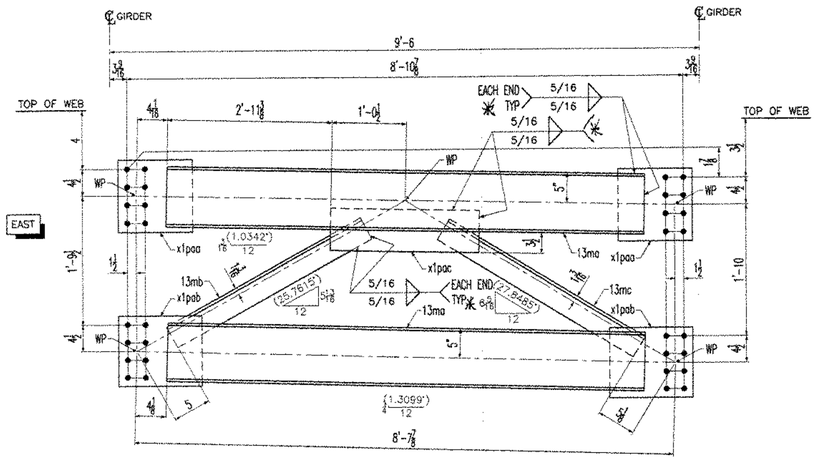
This drawing shall not be used or reproduced in any manner, nor shall any similar drawings or structures be made therefrom, nor shall the information thereon be used for any purpose other than that for which it is released without the written consent of an officer of EASTERN BRIDGE LLC.

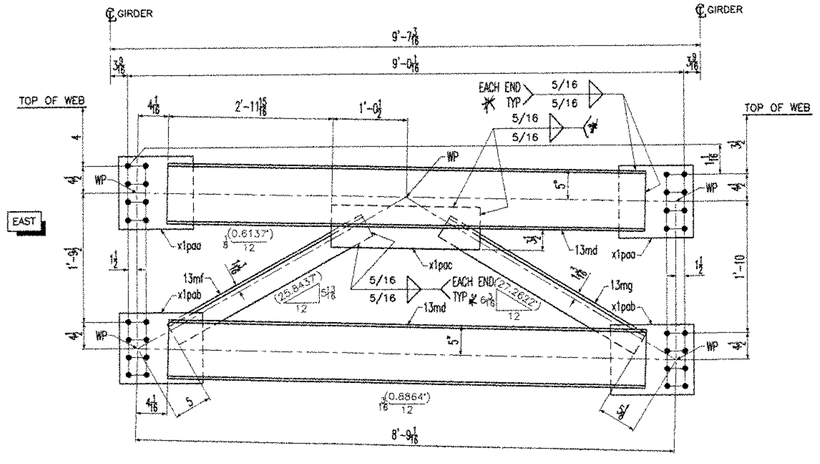
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

| | | | |
|---|---|---|---|
| PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER | | | |
| LOCATION: CHESTER, VERMONT | | | |
| ENGINEER: McFARLAND-JOHNSON, INC. | | | |
| CUSTOMER: EASTERN BRIDGE LLC | | | |
| DRAWING TITLE: INTERMEDIATE CROSS FRAMES | | | |
| DRAWN BY: D.B. | 10/31/03 | JOB NUMBER: 4065 | SHEET NUMBER: 12 |
| CHECKED BY: L.D. | 11/14/03 | | |

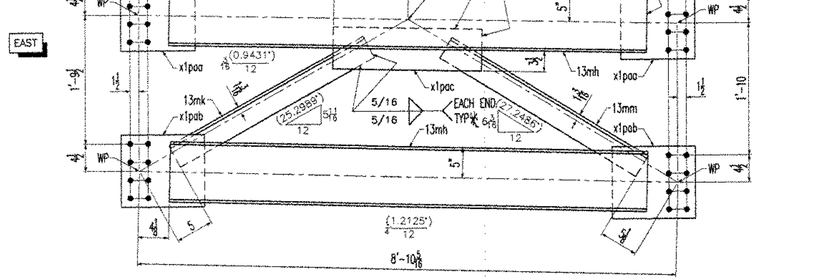
10355



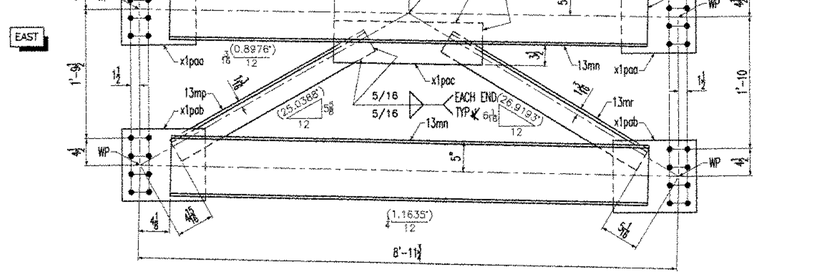

ITEM 13CF1A (1 REQ'D)
NTS



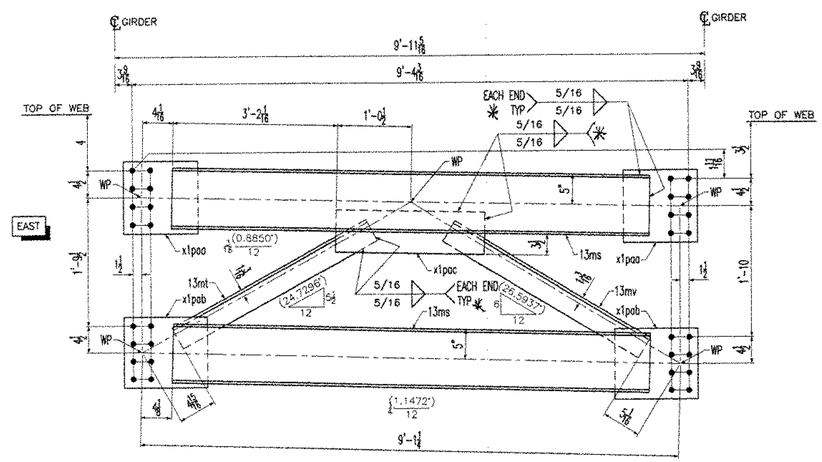

ITEM 13CF1B (1 REQ'D)
NTS




ITEM 13CF1C (1 REQ'D)
NTS




ITEM 13CF1D (1 REQ'D)
NTS




ITEM 13CF1E (1 REQ'D)
NTS

* ALL GIRDSFRAME FILLET WELDS:
WPS 10-1 OR 00-03

## BILL OF MATERIAL

| Drawing Number | Revision Number | Ship Mark | Piece Mark | Qty | Type of Material | Size of Material | Grade | Length | Weight | Finish | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 | | 13CF1A | 13ma | 2 | C Channels | 10x20 | M270M-GR50W | 7'-11 11/16 | 319 | (CVN) | 20 |
| 13 | | 13CF1A | 13mb | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-8 5/8 | 47 | (CVN) | 17 |
| 13 | | 13CF1A | 13mc | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-9 9/16 | 48 | (CVN) | 17 |
| 13 | | 13CF1A | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 13 | | 13CF1A | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 13 | | 13CF1A | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 13 | | 13CF1B | 13md | 2 | C Channels | 10x20 | M270M-GR50W | 8'-0 15/16 | 323 | (CVN) | 20 |
| 13 | | 13CF1B | 13mf | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-9 5/16 | 48 | (CVN) | 17 |
| 13 | | 13CF1B | 13mg | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-10 | 49 | (CVN) | 17 |
| 13 | | 13CF1B | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 13 | | 13CF1B | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 13 | | 13CF1B | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 13 | | 13CF1C | 13mh | 2 | C Channels | 10x20 | M270M-GR50W | 8'-2 3/16 | 327 | (CVN) | 20 |
| 13 | | 13CF1C | 13mk | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-9 13/16 | 48 | (CVN) | 17 |
| 13 | | 13CF1C | 13mm | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-10 11/16 | 49 | (CVN) | 17 |
| 13 | | 13CF1C | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 13 | | 13CF1C | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 13 | | 13CF1C | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 13 | | 13CF1D | 13mn | 2 | C Channels | 10x20 | M270M-GR50W | 8'-3 9/16 | 332 | (CVN) | 20 |
| 13 | | 13CF1D | 13mp | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-10 1/2 | 49 | (CVN) | 17 |
| 13 | | 13CF1D | 13mr | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-11 5/16 | 50 | (CVN) | 17 |
| 13 | | 13CF1D | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 13 | | 13CF1D | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 13 | | 13CF1D | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |
| 13 | | 13CF1E | 13ms | 2 | C Channels | 10x20 | M270M-GR50W | 8'-5 1/8 | 337 | (CVN) | 20 |
| 13 | | 13CF1E | 13mt | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 3'-11 3/16 | 50 | (CVN) | 17 |
| 13 | | 13CF1E | 13mv | 1 | L Angles | 4x4x1/2 | M270M-GR50W | 4'-0 | 51 | (CVN) | 17 |
| 13 | | 13CF1E | x1paa | 2 | PL Plate | 1/2x12 | M270M-GR50W | 0'-11 1/2 | 20 | (CVN) | 14 |
| 13 | | 13CF1E | x1pab | 2 | PL Plate | 1/2x12 | M270M-GR50W | 1'-1 | 22 | (CVN) | 14 |
| 13 | | 13CF1E | x1pac | 1 | PL Plate | 1/2x7 | M270M-GR50W | 2'-1 | 25 | (CVN) | 13 |

| | |
|---|---|
| TOTAL WEIGHT | 2462 |
| -CUTS | |
| +FIELD BOLTS | REFER TO 'E' DWG |
| +WELD | 30 |
| NET TOTAL | 2492 |

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed ☐ Furnish as Corrected
☐ Rejected ☐ Revise and Resubmit
☐ Submit Specified Item

This review is for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Contractor is responsible for dimensions to be confirmed and correlated at the job site. Fabrication processes and techniques of construction are the responsibility of the Contractor. Review of a specific item shall not indicate that the reviewer has agreed to or approved any change in the contract price or contract time unless the Shop Drawing submission so states in writing. The review shall not relieve the Contractor of responsibility for errors or omissions in the Shop Drawings or of his responsibility to meet all requirements of the construction and the Contract Documents. The review is only for conformance with the design concept of the project and compliance with the information given in the Contract Documents. Contractor is responsible for and has control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the work and all trades.

McFarland-Johnson, Inc. _____
Date 12-17-03
By RSW
RESERVED FOR STAMPS

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
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| 8 X | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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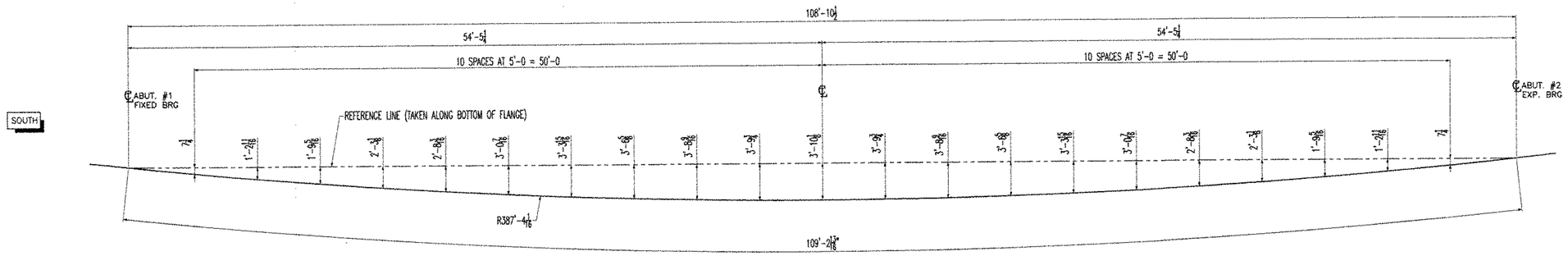
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

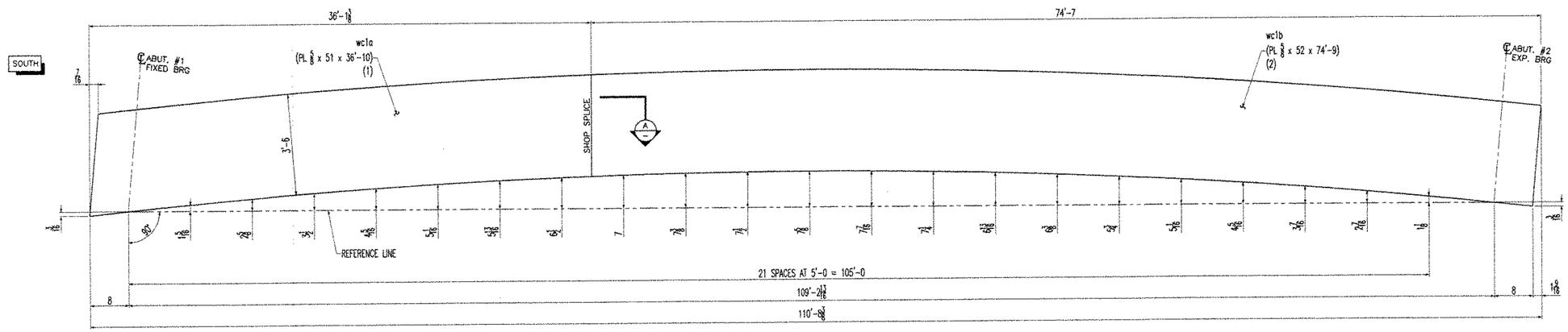
PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER
LOCATION: CHESTER, VERMONT
ENGINEER: McFARLAND-JOHNSON, INC.
CUSTOMER: EASTERN BRIDGE LLC
DRAWING TITLE: ABUTMENT CROSS FRAMES
DRAWN BY: D.B. 10/31/03
CHECKED BY: L.D. 11/14/03
JOB NUMBER: 4065
SHEET NUMBER: 13

10955



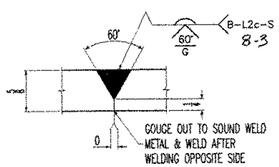

HORIZONTAL CURVE DIAGRAM FOR 1G1A (1 REQ'D)

NTS




CAMBER DIAGRAM FOR GIRDER 1G1A (1 REQ'D)

NTS




SECTION A

NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed
☐ Rejected

☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

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McFarland-Johnson, Inc.
Date 12-17-03
By SFD

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
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| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 X | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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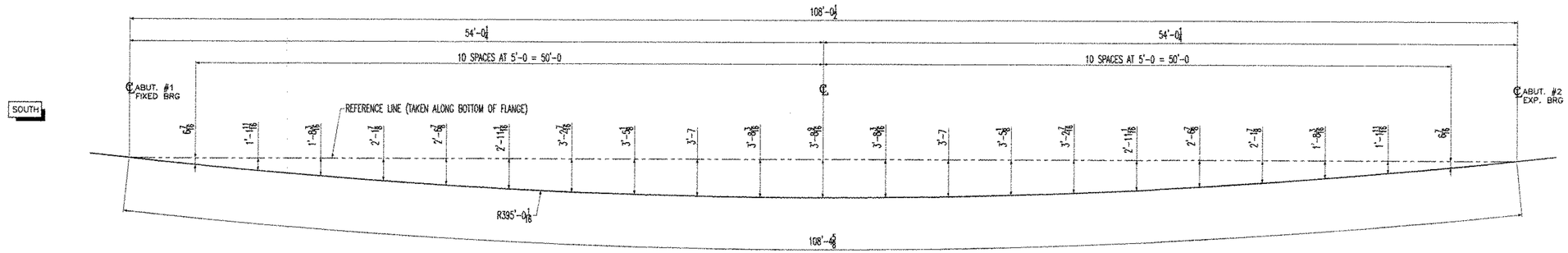
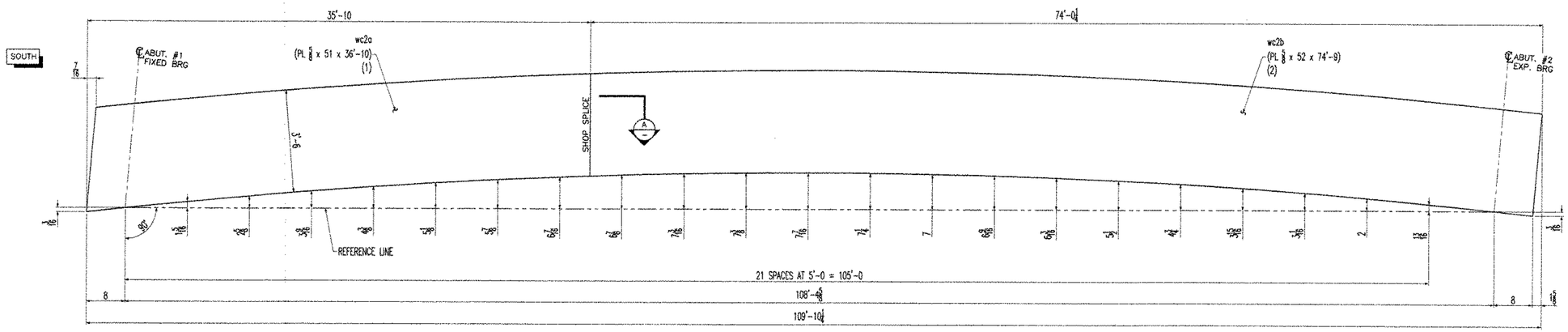
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

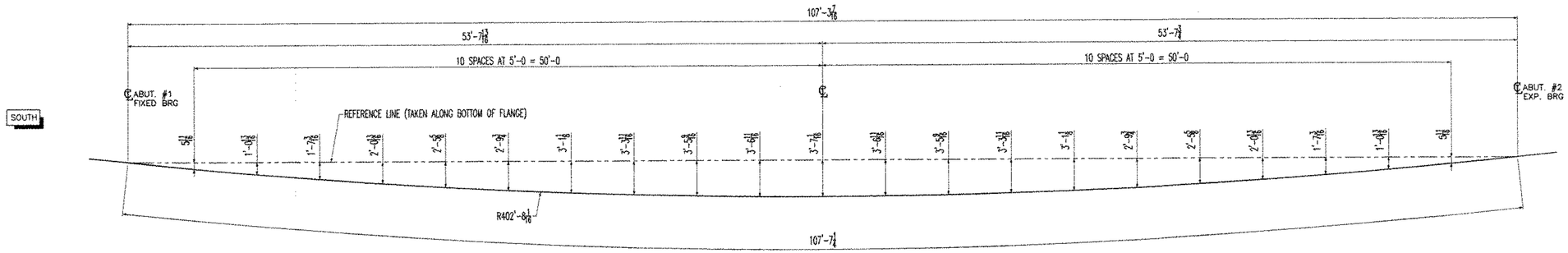
| | | | |
|---|---|---|---|
| PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER | | | |
| LOCATION: CHESTER, VERMONT | | | |
| ENGINEER: McFARLAND-JOHNSON, INC. | | | |
| CUSTOMER: EASTERN BRIDGE LLC | | | |
| DRAWING TITLE: CAMBER AND HORIZONTAL DIAGRAM FOR 1G1A | | | |
| DRAWN BY: D.B. 10/14/03 | JOB NUMBER: 4065 | SHEET NUMBER: WC1 | |
| CHECKED BY: L.D. 11/14/03 | | | |

105 55



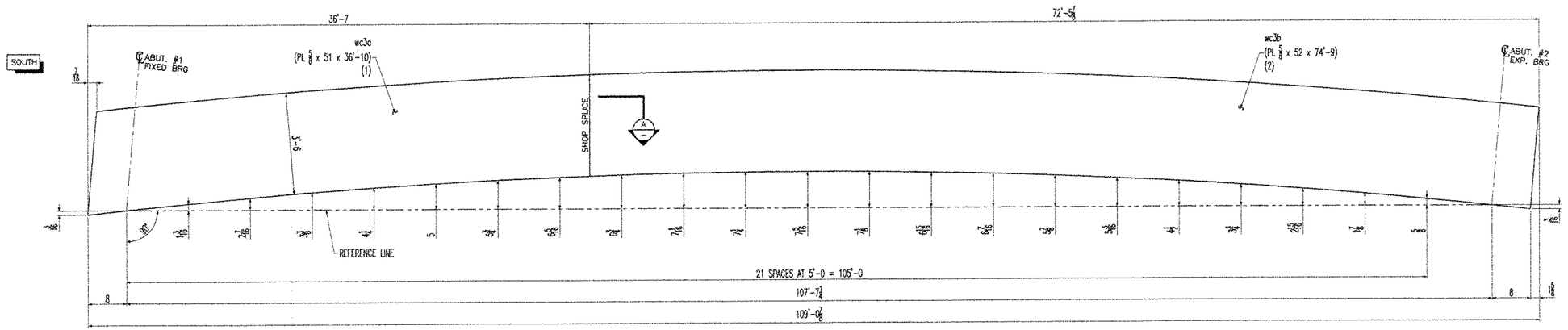

HORIZONTAL CURVE DIAGRAM FOR 2G2A (1 REQ'D)
NTS





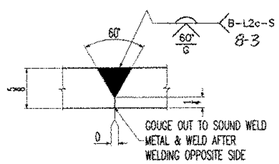

HORIZONTAL CURVE DIAGRAM FOR 3G3A (1 REQ'D)

NTS




CAMBER DIAGRAM FOR GIRDER 3G3A (1 REQ'D)

NTS




SECTION A

NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Items

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McFarland-Johnson, Inc.
Date 12-17-03
By SFD

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

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| 3 | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

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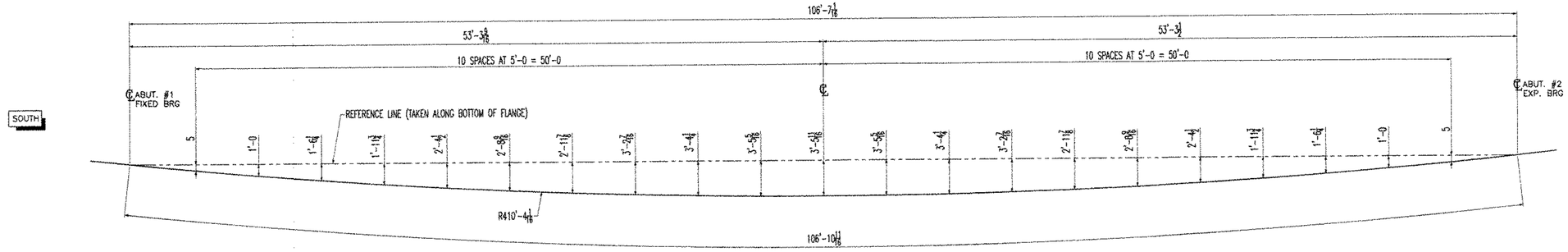
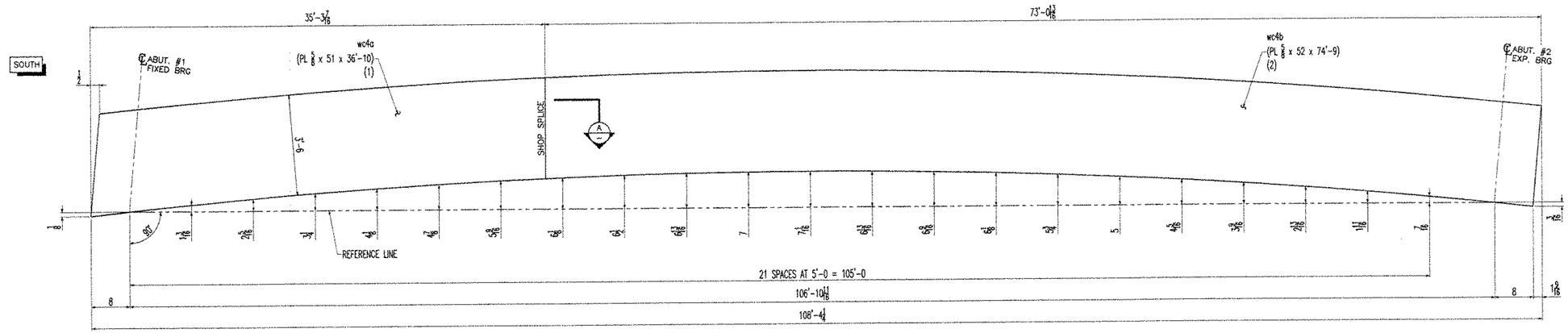
|---|---|---|---|
| PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER | | | |
| LOCATION: CHESTER, VERMONT | | | |
| ENGINEER: McFARLAND-JOHNSON, INC. | | | |
| CUSTOMER: EASTERN BRIDGE LLC | | | |
| DRAWING TITLE: CAMBER AND HORIZONTAL DIAGRAM FOR 3G3A | | | |
| DRAWN BY: D.B. | 10/28/03 | JOB NUMBER: 4065 | SHEET NUMBER: WC3 |
| CHECKED BY: L.D. | 11/14/03 | | |

10755



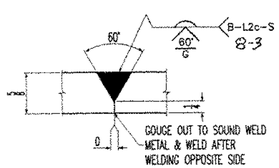

HORIZONTAL CURVE DIAGRAM FOR 4G4A (1 REQ'D)

NTS




CAMBER DIAGRAM FOR GIRDER 4G4A (1 REQ'D)

NTS




SECTION A

NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed ☐ Furnish as Corrected
☐ Rejected ☐ Revise and Resubmit
☑ Submit Specified Item

The review is only for general conformance with the design concept and the information given in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve the contractor from compliance with the requirements of the plans and specifications. Review of a specific item shall not include review of an assembly of which the item is a component. Contractor is responsible for dimensions to be confirmed and correlated at the job site, information that pertains solely to the fabrication process or to the means, methods, techniques, sequences and procedures of construction, coordination of the work with that of all other trades and performing all work in a safe and satisfactory manner.

McFarland-Johnson, Inc.

Date 12-17-03

By SFD

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:

AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

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| 8,Y | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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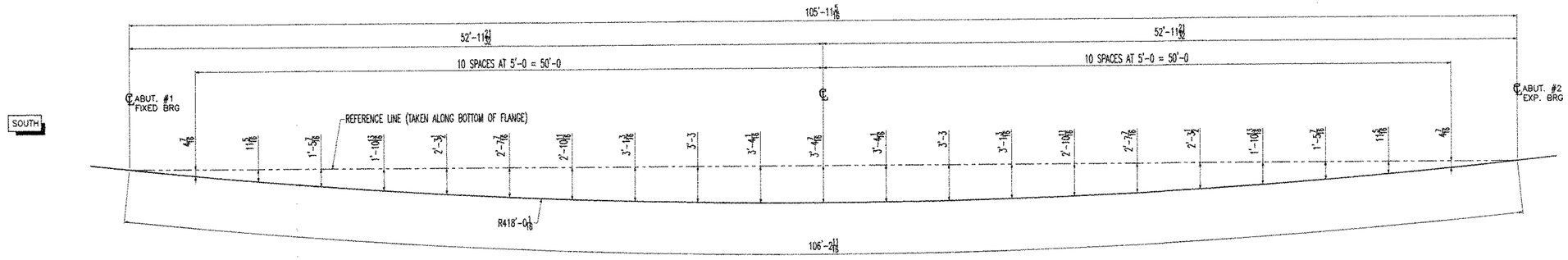
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

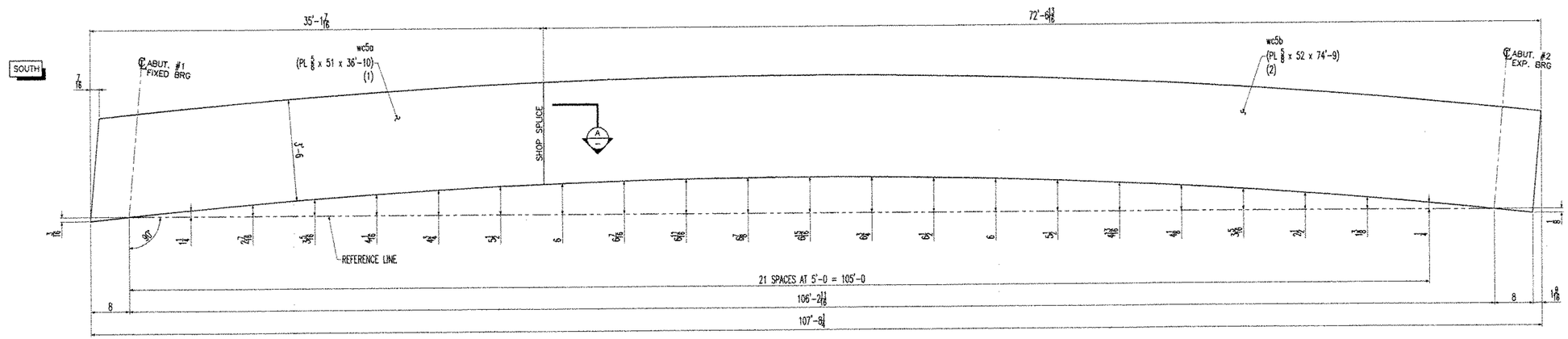
| | |
|---|---|
| PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER | |
| LOCATION: CHESTER, VERMONT | |
| ENGINEER: McFARLAND-JOHNSON, INC. | |
| CUSTOMER: EASTERN BRIDGE LLC | |
| DRAWING TITLE: CAMBER AND HORIZONTAL DIAGRAM FOR 4G4A | |
| DRAWN BY: D.B. 10/28/03 | JOB NUMBER: 4065 |
| CHECKED BY: L.D. 11/14/03 | SHEET NUMBER: WC4 |

10855



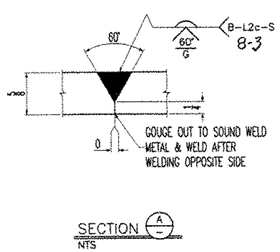

HORIZONTAL CURVE DIAGRAM FOR 5G5A (1 REQ'D)

NTS




CAMBER DIAGRAM FOR GIRDER 5G5A (1 REQ'D)

NTS




SECTION A

NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

This review is only for general conformance with the design concept of the project and general compliance with the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve the contractor from compliance with the requirements of the plans and specifications. This review does not relieve the contractor from responsibility for errors or omissions in the shop drawings or for dimensions which do not fit the field construction. The contractor is responsible for dimensions to be confirmed and correlated at the job site. Fabrication processes and techniques of construction are the responsibility of the contractor. Review of a specific item shall not include review of an assembly of which the item is a component. The contractor is responsible for determining and verifying all quantities and dimensions, for performing all work in a safe and satisfactory manner, for compliance with all applicable laws, codes, rules and regulations that pertains solely to the fabrication process or to the means, methods, techniques, sequences and procedures of construction, compliance with the Occupational Safety and Health Act of 1970 as amended and all other related acts and performing all work in a safe and satisfactory manner.

McFarland-Johnson, Inc.
Date 12-17-03
By SFD

RESERVED FOR STAMPS

STATE OF VERMONT
AGENCY OF TRANSPORTATION
12.20.03

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

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| 8 X | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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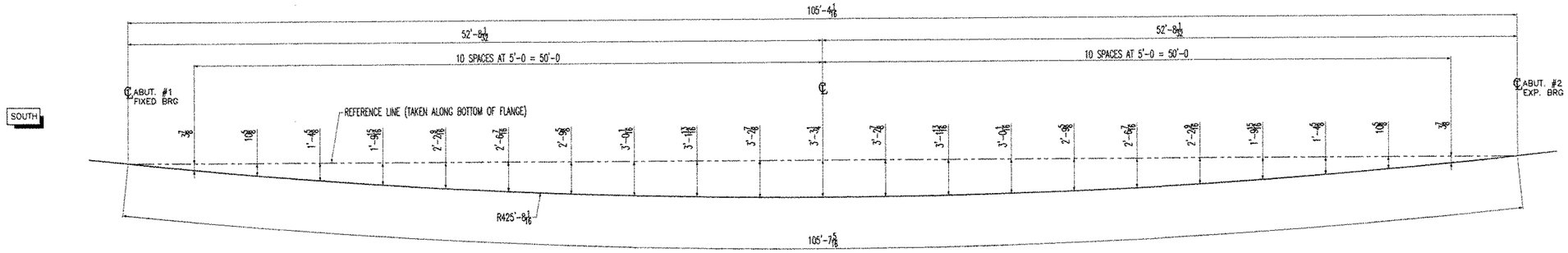
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

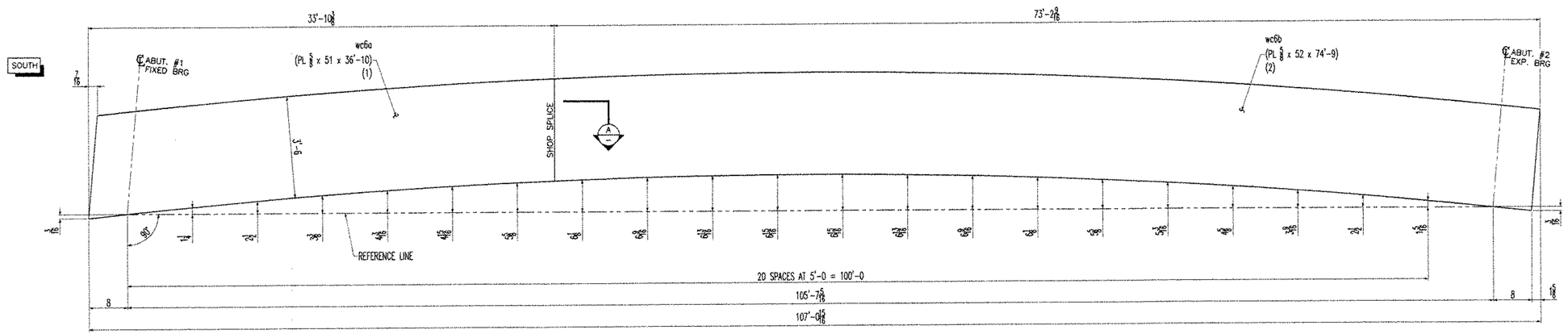
PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER
LOCATION: CHESTER, VERMONT
ENGINEER: McFARLAND-JOHNSON, INC.
CUSTOMER: EASTERN BRIDGE LLC
DRAWING TITLE: CAMBER AND HORIZONTAL DIAGRAM FOR 5G5A
DRAWN BY: D.B. 10/29/03 | JOB NUMBER: 4065 | SHEET NUMBER: WC5
CHECKED BY: L.D. 11/14/03

10955



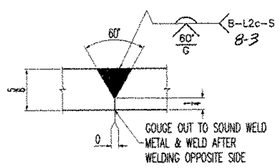

HORIZONTAL CURVE DIAGRAM FOR 6G6A (1 REQ'D)

NTS




CAMBER DIAGRAM FOR GIRDER 6G6A (1 REQ'D)

NTS




SECTION A

NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise as
☐ Submit

Date 12-17-03
By SFD

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:

AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

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| 8 ✓ | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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EASTERN BRIDGE LLC
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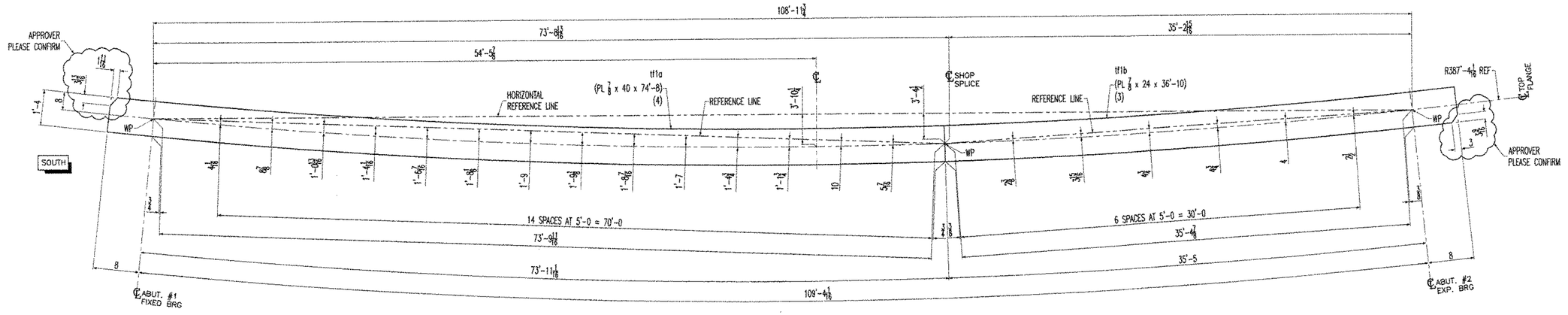
CLAREMONT, NH 03743
603-542-5202

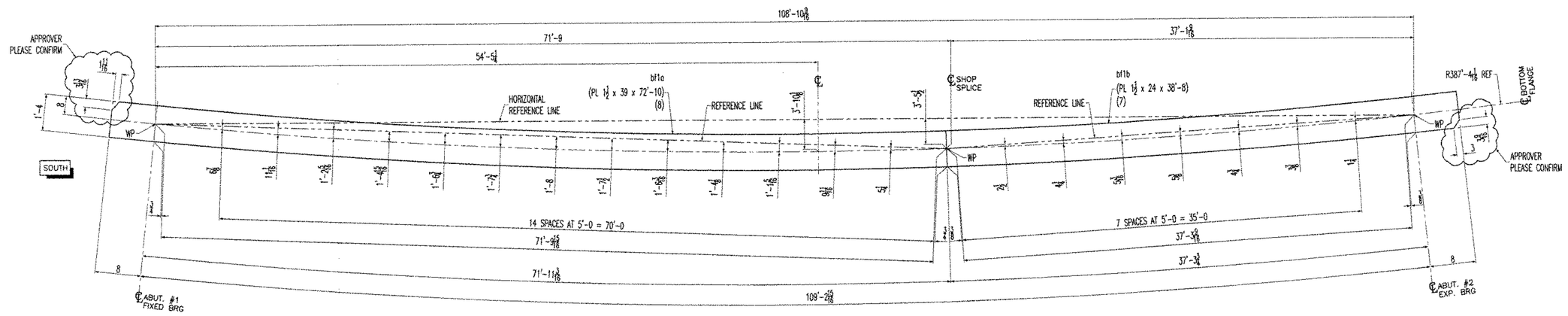
| | |
|---|---|
| PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER | |
| LOCATION: CHESTER, VERMONT | |
| ENGINEER: McFARLAND-JOHNSON, INC. | |
| CUSTOMER: EASTERN BRIDGE LLC | |
| DRAWING TITLE: CAMBER AND HORIZONTAL DIAGRAM FOR 6G6A | |
| DRAWN BY: D.B. 10/29/03 | JOB NUMBER: 4065 / SHEET NUMBER: WC6 |
| CHECKED BY: L.D. 11/14/03 | |

110 55



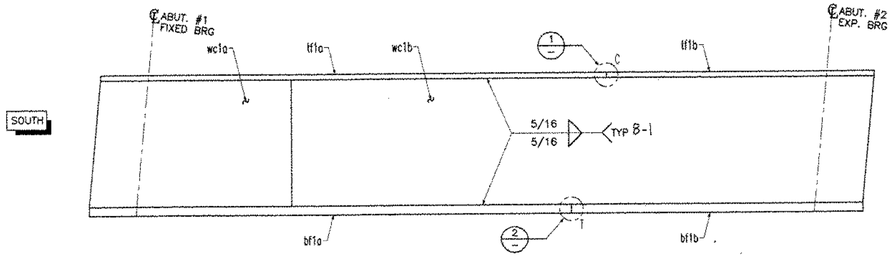

TOP FLANGE SPLICING DIAGRAM FOR GIRDER 1G1A (1 REQ'D)

NTS



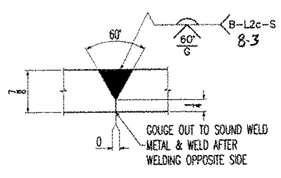

BOTTOM FLANGE SPLICING DIAGRAM FOR GIRDER 1G1A (1 REQ'D)

NTS



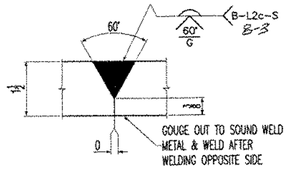

FLANGE DIAGRAM FOR 1G1A (1 REQ'D)

NTS




DETAIL 1

NTS




DETAIL 2

NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)
3- THE LETTERS "T" OR "C" AT SHOP WELDED SPLICES INDICATE TENSION AND COMPRESSION RESPECTIVELY AND SHOULD BE TESTED PER VERMONT AGENCY OF TRANSPORTATION SPECIFICATIONS FOR CONSTRUCTION.

☒ Reviewed
☐ Rejected

☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Items

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McFarland-Johnson, Inc.

Date 12-17-03

By SFD

RESERVED FOR STAMPS

STATE OF VERMONT
DEPARTMENT OF TRANSPORTATION
Approved 11-20-03

DRAWINGS PREPARED BY:

AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

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| 8 ✗ | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

| | |
|---|---|
| PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER | |
| LOCATION: CHESTER, VERMONT | |
| ENGINEER: McFARLAND-JOHNSON, INC. | |
| CUSTOMER: EASTERN BRIDGE LLC | |
| DRAWING TITLE: FLANGE SPLICING DIAGRAM FOR GIRDER 1G1A | |
| DRAWN BY: D.B. 10/20/03 | JOB NUMBER: 4065 / SHEET NUMBER: FS1 |
| CHECKED BY: L.D. 11/14/03 | |

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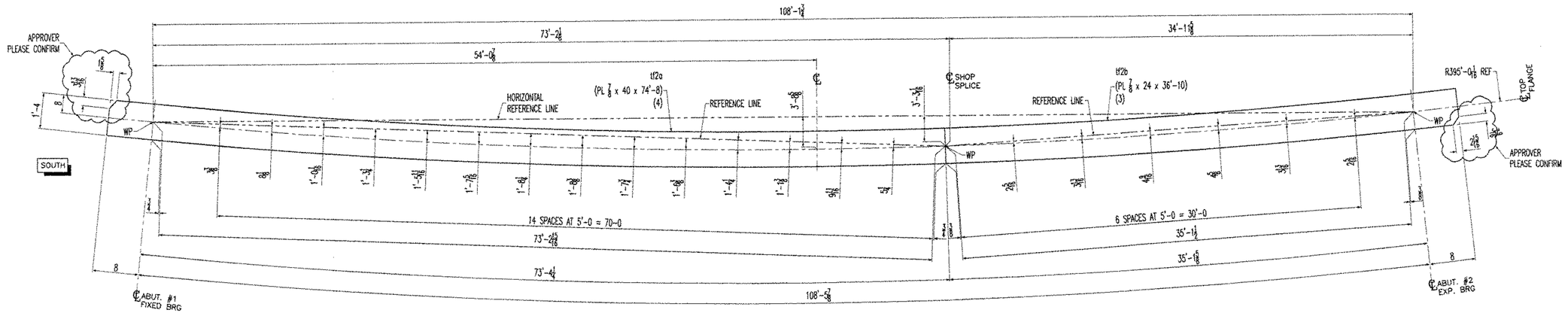
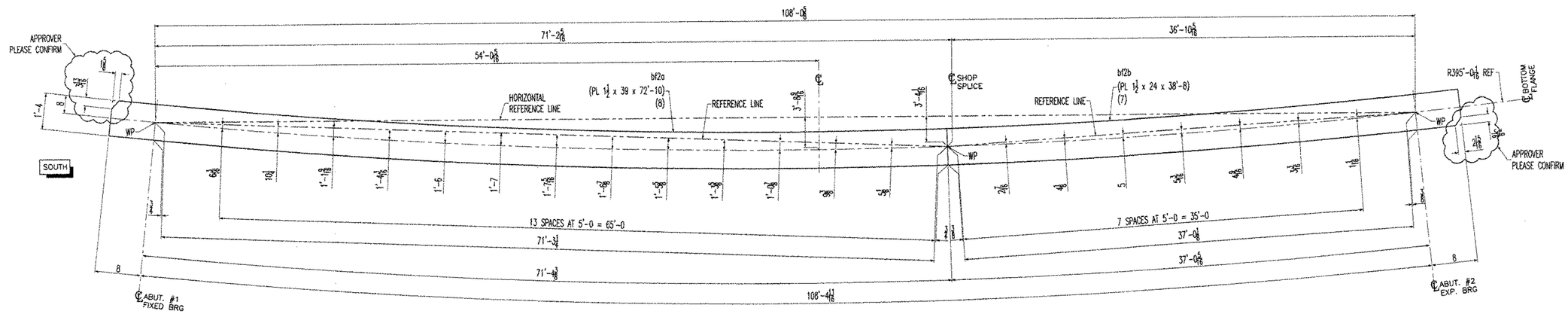



TOP FLANGE SPLICING DIAGRAM FOR GIRDER 2G2A (1 REQ'D)

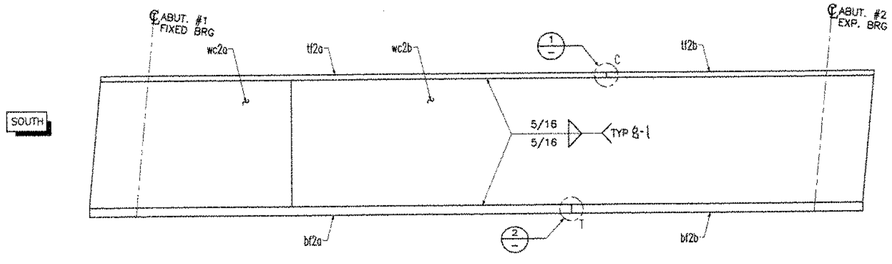
NTS




BOTTOM FLANGE SPLICING DIAGRAM FOR GIRDER 2G2A (1 REQ'D)

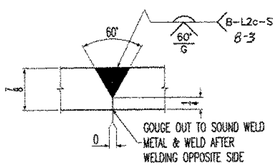
NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)
3- THE LETTERS "T" OR "C" AT SHOP WELDED SPLICES INDICATE TENSION AND COMPRESSION RESPECTIVELY AND SHOULD BE TESTED PER VERMONT AGENCY OF TRANSPORTATION SPECIFICATIONS FOR CONSTRUCTION.



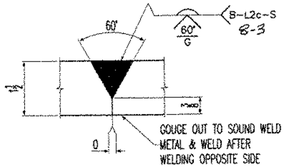

FLANGE DIAGRAM FOR 2G2A (1 REQ'D)

NTS




DETAIL 1

NTS




DETAIL 2

NTS

☑ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Spec.

This review is only for general conformance with the design concept of the project and general compliance with the Contract Documents. Contractor is responsible for dimensions to be confirmed and correlated at the jobsite, fabrication processes and techniques of construction, coordination of his work with that of all other trades and for the satisfactory performance of his work. Approval of a specific item shall not indicate approval of an assembly in which the item functions.

McFarland-Johnson, Inc.
Date 12-17-03
By SFD

RESERVED FOR STAMPS

11/20/03

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

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| 8 | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

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|---|---|
| PROJECT: | BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER |
| LOCATION: | CHESTER, VERMONT |
| ENGINEER: | McFARLAND-JOHNSON, INC. |
| CUSTOMER: | EASTERN BRIDGE LLC |
| DRAWING TITLE: | FLANGE SPLICING DIAGRAM FOR GIRDER 2G2A |
| DRAWN BY: D.B. 10/22/03 | JOB NUMBER: 4065 |
| CHECKED BY: L.D. 11/14/03 | SHEET NUMBER: FS2 |

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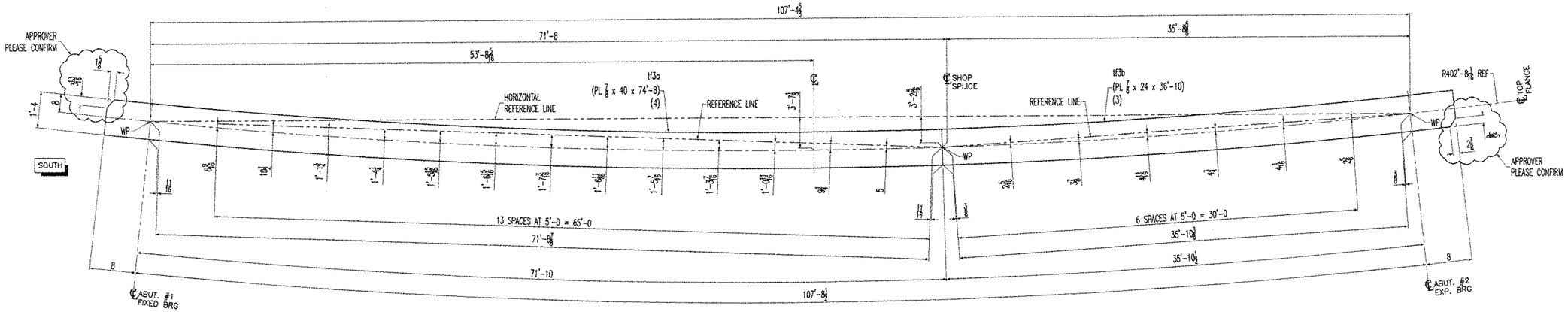
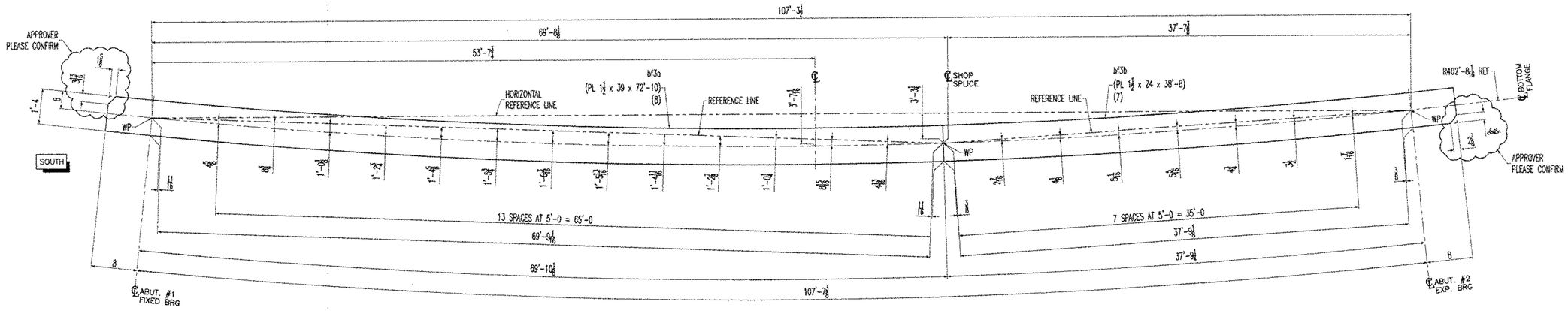


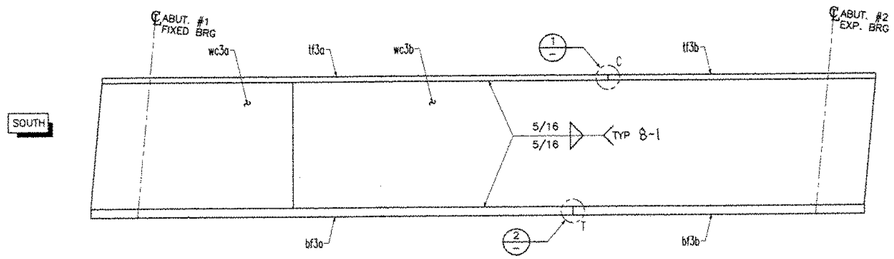

TOP FLANGE SPLICING DIAGRAM FOR GIRDER 3G3A (1 REQ'D)

NTS



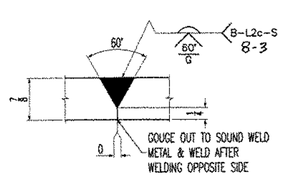

BOTTOM FLANGE SPLICING DIAGRAM FOR GIRDER 3G3A (1 REQ'D)

NTS



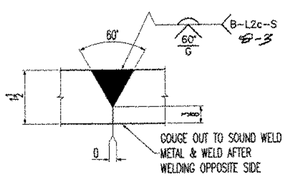

FLANGE DIAGRAM FOR 3G3A (1 REQ'D)

NTS




DETAIL 1

NTS




DETAIL 2

NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)
3- THE LETTERS "T" OR "C" AT SHOP WELDED SPLICES INDICATE TENSION AND COMPRESSION RESPECTIVELY AND SHOULD BE TESTED PER VERMONT AGENCY OF TRANSPORTATION SPECIFICATIONS FOR CONSTRUCTION.

☑ Reviewed ☐ Furnish as Corrected
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McFarland-Johnson, Inc.

Date 12-17-03

By SFD

RESERVED FOR STAMPS

STATE BRIDGE ENGINEER 4-20-05

DRAWINGS PREPARED BY:

AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
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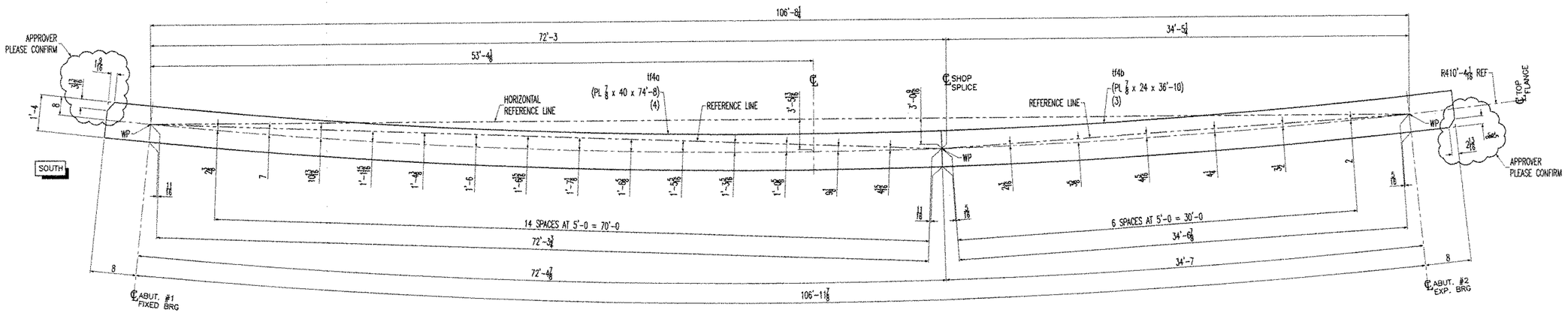
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

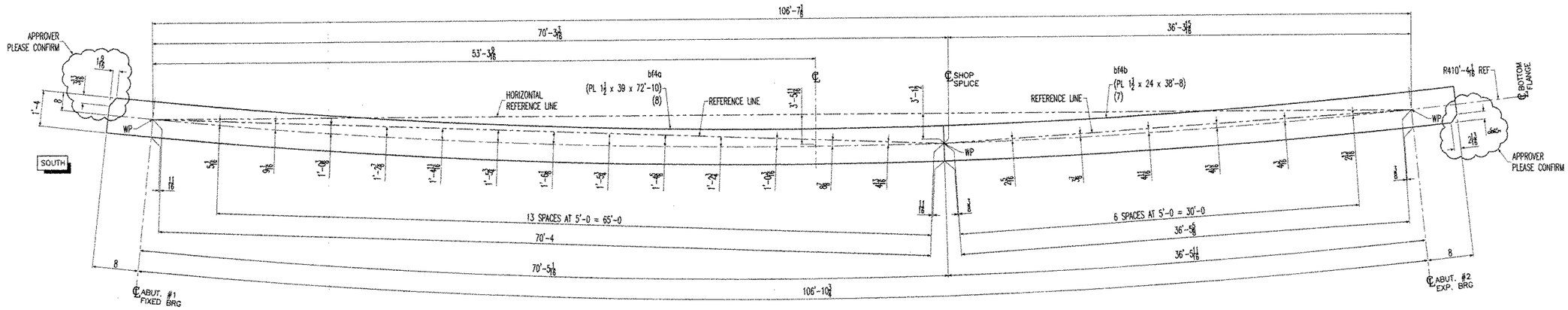
| | |
|---|---|
| PROJECT: | BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER |
| LOCATION: | CHESTER, VERMONT |
| ENGINEER: | McFARLAND-JOHNSON, INC. |
| CUSTOMER: | EASTERN BRIDGE LLC |
| DRAWING TITLE: | FLANGE SPLICING DIAGRAM FOR GIRDER 3G3A |
| DRAWN BY: D.B. 10/28/03 | JOB NUMBER: 4065 |
| CHECKED BY: L.D. 11/14/03 | SHEET NUMBER: FS3 |

1135



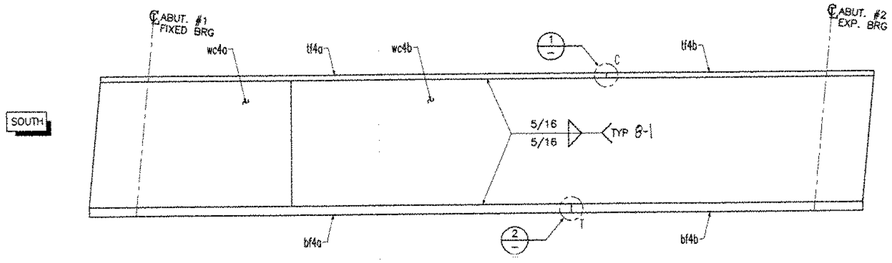

TOP FLANGE SPLICING DIAGRAM FOR GIRDER 4G4A (1 REQ'D)

NTS



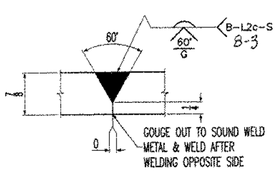

BOTTOM FLANGE SPLICING DIAGRAM FOR GIRDER 4G4A (1 REQ'D)

NTS



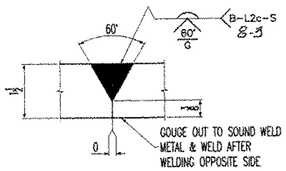

FLANGE DIAGRAM FOR 4G4A (1 REQ'D)

NTS




DETAIL 1

NTS




DETAIL 2

NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)
3- THE LETTERS "T" OR "C" AT SHOP WELDED SPLICES INDICATE TENSION AND COMPRESSION RESPECTIVELY AND SHOULD BE TESTED PER VERMONT AGENCY OF TRANSPORTATION SPECIFICATIONS FOR CONSTRUCTION.

☑ Reviewed ☐ Furnish as Corrected
☐ Rejected ☐ Revise and Resubmit
☐ Submit Specified Item

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McFarland-Johnson, Inc. 12-17-03
By

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

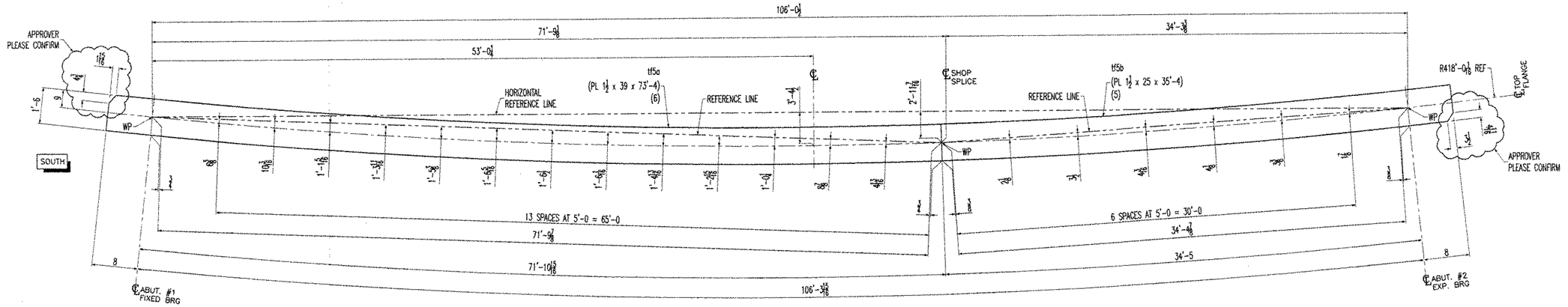
| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 ✓ | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

NOTICE
This drawing shall not be used or reproduced in any manner, nor shall any similar drawings or structures be made therefrom, nor shall the information thereon be used for any purpose other than that for which it is released without the written consent of an officer of EASTERN BRIDGE LLC.

EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

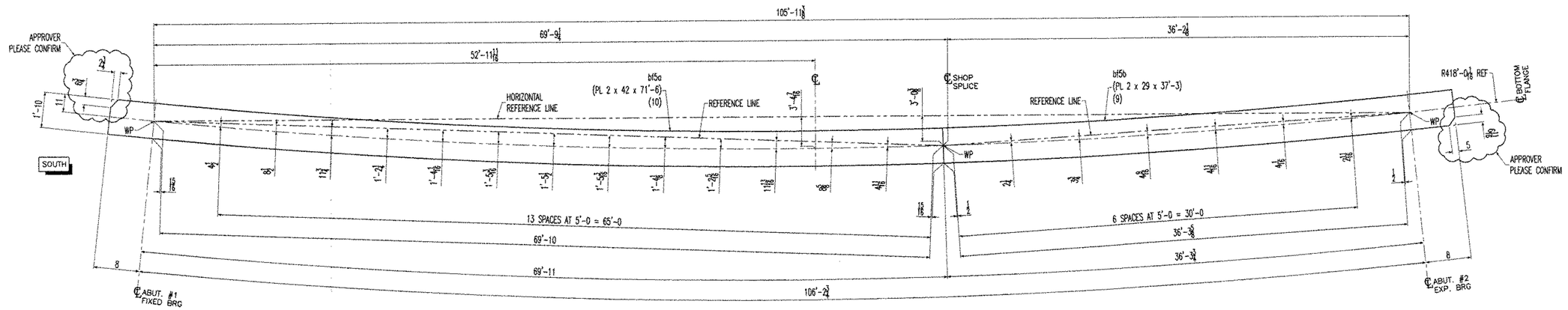
PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER
LOCATION: CHESTER, VERMONT
ENGINEER: McFARLAND-JOHNSON, INC.
CUSTOMER: EASTERN BRIDGE LLC
DRAWING TITLE: FLANGE SPLICING DIAGRAM FOR GIRDER 4G4A
DRAWN BY: D.B. 10/28/03 | JOB NUMBER: 4065 | SHEET NUMBER: FS4
CHECKED BY: L.D. 11/14/03

1145




TOP FLANGE SPLICING DIAGRAM FOR GIRDER 5G5A (1 REQ'D)

NTS




BOTTOM FLANGE SPLICING DIAGRAM FOR GIRDER 5G5A (1 REQ'D)

NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)
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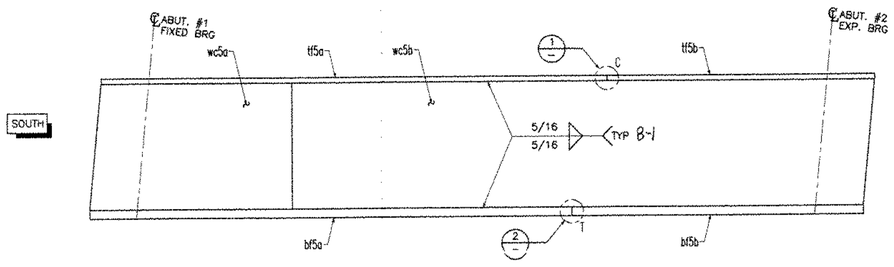
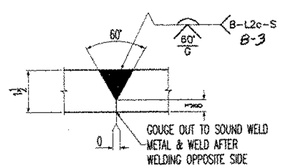


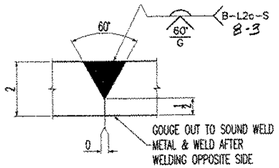

FLANGE DIAGRAM FOR 5G5A (1 REQ'D)

NTS




DETAIL 1

NTS




DETAIL 2

NTS

Reviewed
Revise
Furnish as Corrected
Resubmit

Date 12-17-03

By SFD

RESERVED FOR STAMPS

DRAWINGS PREPARED BY:

AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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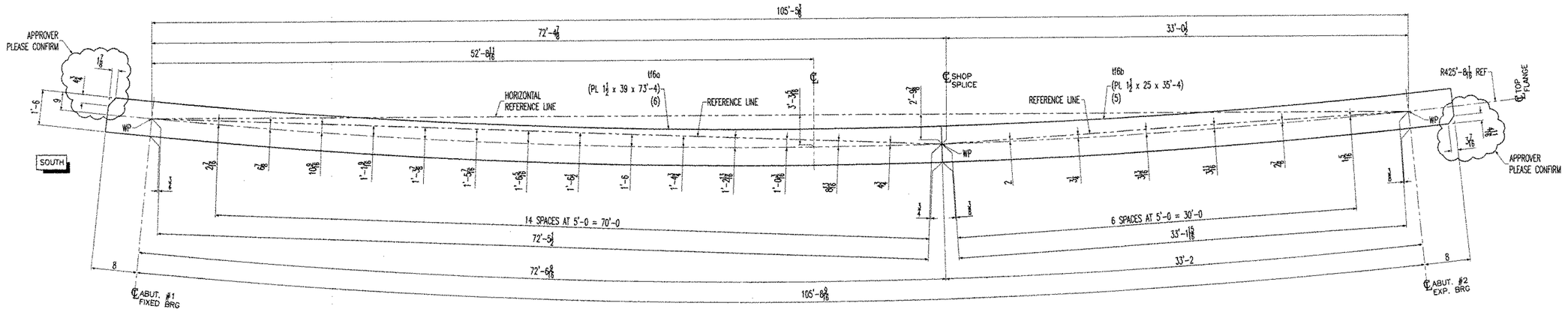
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

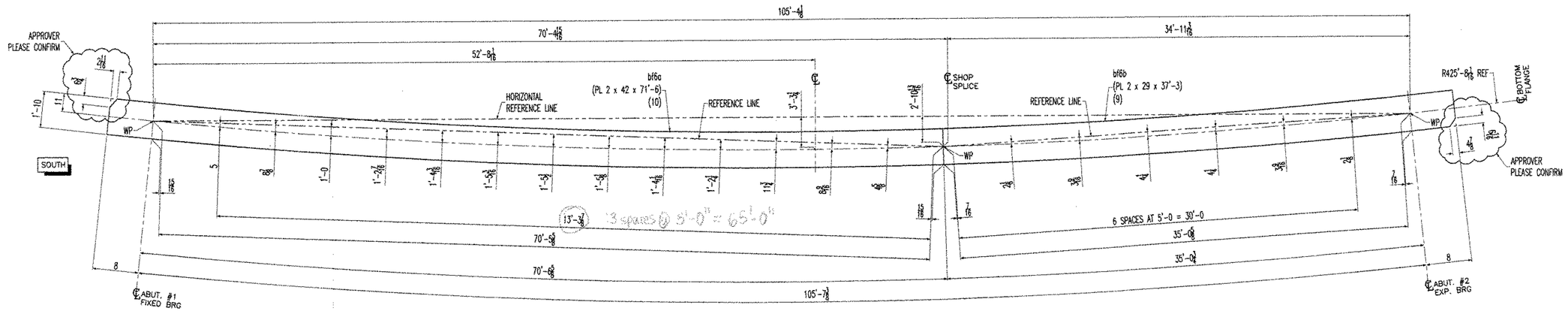
PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER
LOCATION: CHESTER, VERMONT
ENGINEER: McFARLAND-JOHNSON, INC.
CUSTOMER: EASTERN BRIDGE LLC
DRAWING TITLE: FLANGE SPLICING DIAGRAM FOR GIRDER 5G5A
DRAWN BY: D.B. 10/29/03 | JOB NUMBER: 4065 | SHEET NUMBER: FS5
CHECKED BY: L.D. 11/14/03

11 55



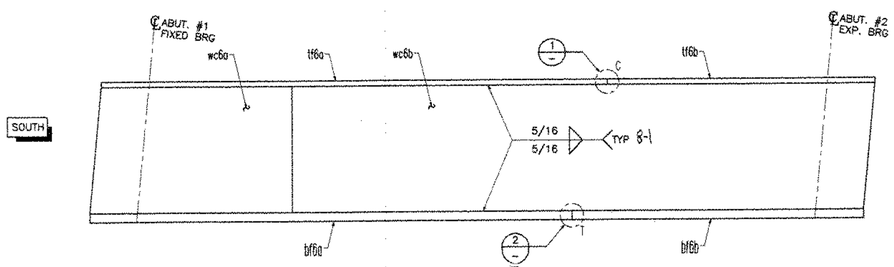

TOP FLANGE SPLICING DIAGRAM FOR GIRDER 6G6A (1 REQ'D)

NTS



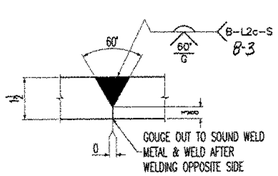

BOTTOM FLANGE SPLICING DIAGRAM FOR GIRDER 6G6A (1 REQ'D)

NTS



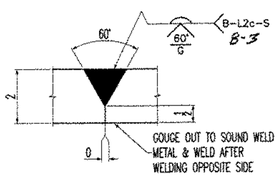

FLANGE DIAGRAM FOR 6G6A (1 REQ'D)

NTS




DETAIL 1

NTS




DETAIL 2

NTS

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)
3- THE LETTERS "T" OR "C" AT SHOP WELDED SPLICES INDICATE TENSION AND COMPRESSION RESPECTIVELY AND SHOULD BE TESTED PER VERMONT AGENCY OF TRANSPORTATION SPECIFICATIONS FOR CONSTRUCTION.

☐ Reviewed
☐ Rejected
☑ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

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McFarland-Johnson, Inc. Date 12-17-03 By SFD

RESERVED FOR STAMPS

VERMONT REGISTERED ENGINEER — 11-20-03

DRAWINGS PREPARED BY:

AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

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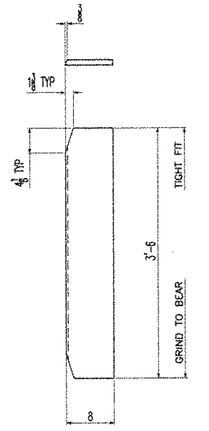
EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

| | |
|---|---|
| PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER | |
| LOCATION: CHESTER, VERMONT | |
| ENGINEER: McFARLAND-JOHNSON, INC. | |
| CUSTOMER: EASTERN BRIDGE LLC | |
| DRAWING TITLE: FLANGE SPLICING DIAGRAM FOR GIRDER 6G6A | |
| DRAWN BY: D.B. 10/29/03 | JOB NUMBER: 4065 / SHEET NUMBER: FS6 |
| CHECKED BY: L.D. 11/14/03 | |

1165




ITEM x1pa (2 REQ'D)
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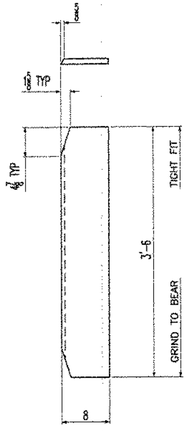


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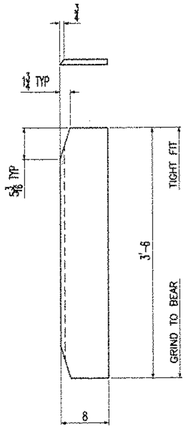


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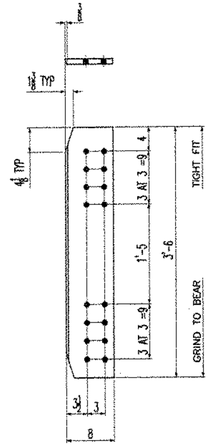


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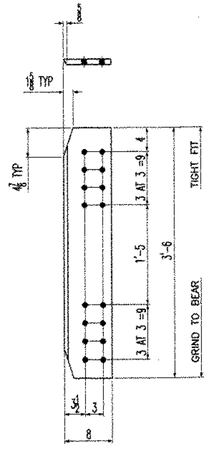


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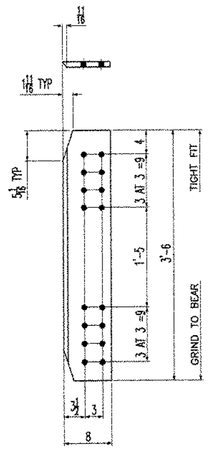


ITEM x1pg (3 REQ'D)
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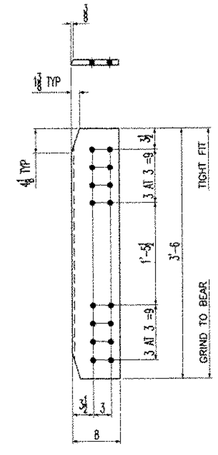


ITEM x1ph (5 REQ'D)
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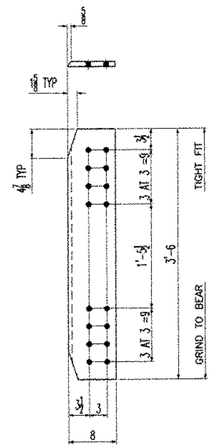


ITEM x1pk (1 REQ'D)
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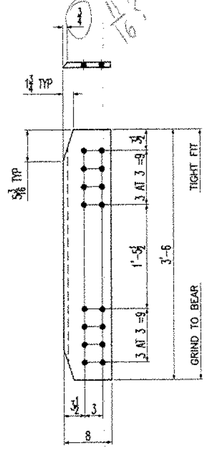
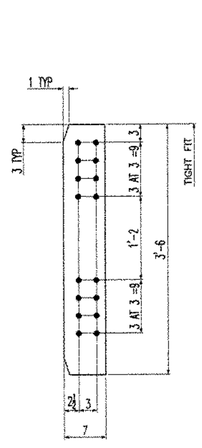
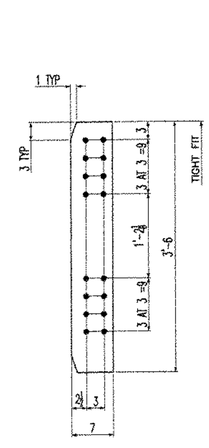


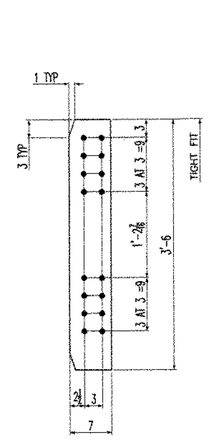

ITEM x1pm (4 REQ'D)
SCALE: 1"=1'-0" (PL⅞x8x3'-6) (11)



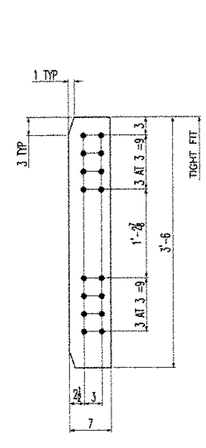

ITEM x1pn (3 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)



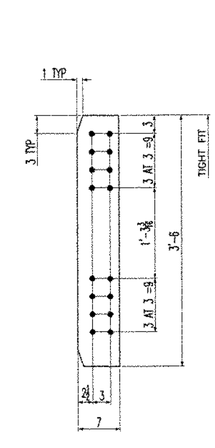

ITEM x1pp (1 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)




ITEM x1pr (1 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)

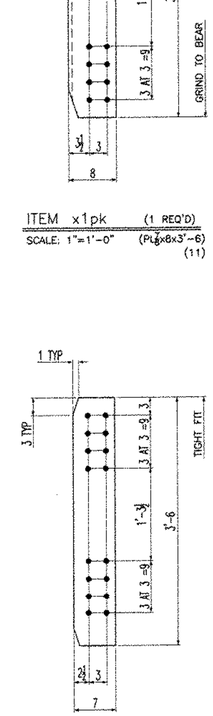



ITEM x1ps (3 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)

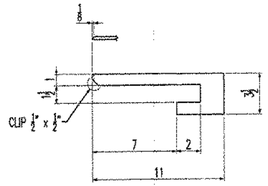



ITEM x1pt (2 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)

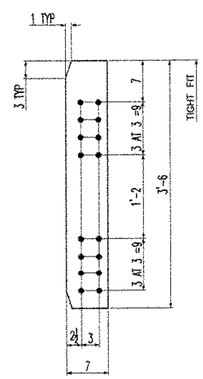
NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)



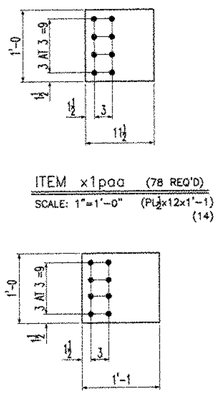

ITEM x1pv (1 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)




ITEM x1py (1 REQ'D)
SCALE: 1"=1'-0" (PL½x4x1'-2¾) (23)



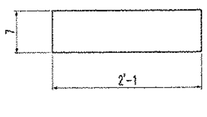

ITEM x1pz (3 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)




ITEM x1paa (78 REQ'D)
SCALE: 1"=1'-0" (PL½x12x1'-1) (14)




ITEM x1pab (78 REQ'D)
SCALE: 1"=1'-0" (PL½x12x1'-1) (14)




ITEM x1pac (39 REQ'D)
SCALE: 1"=1'-0" (PL½x7x2'-1) (13)

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☐ Reviewed
☐ Rejected
☑ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Specified Item

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McFarland-Johnson, Inc.
Date 12-17-03
By RSW
RESERVED FOR STAMPS

EASTERN BRIDGE LLC
DEC-2003

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

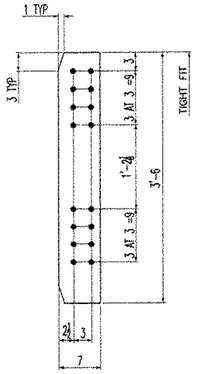
| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER
LOCATION: CHESTER, VERMONT
ENGINEER: McFARLAND-JOHNSON, INC.
CUSTOMER: EASTERN BRIDGE LLC
DRAWING TITLE: DETAILS
DRAWN BY: D.B. 10/29/03
CHECKED BY: L.D. 11/14/03
JOB NUMBER: 4065
SHEET NUMBER: X1

11755

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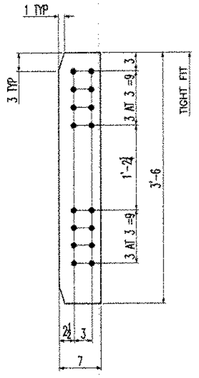


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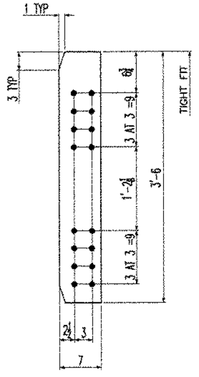


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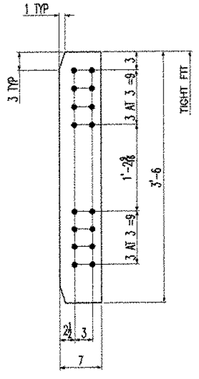


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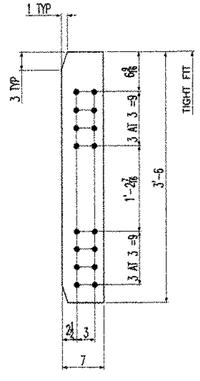


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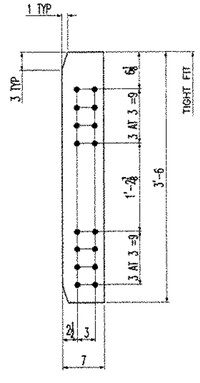


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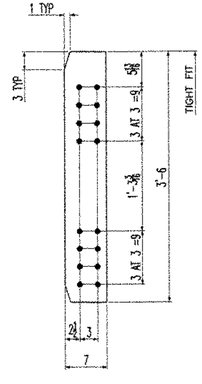


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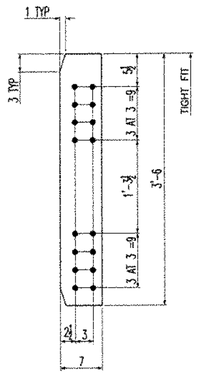


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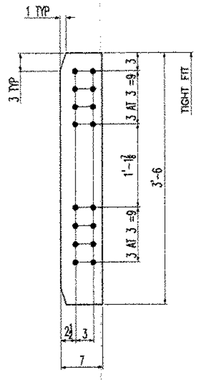


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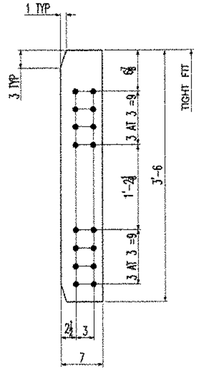


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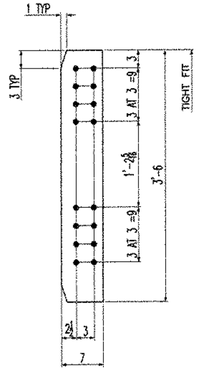


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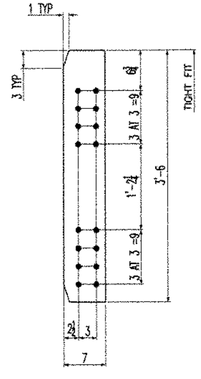


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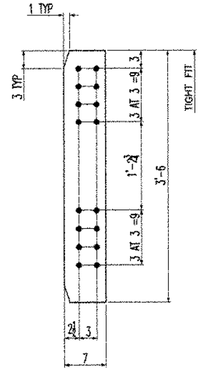


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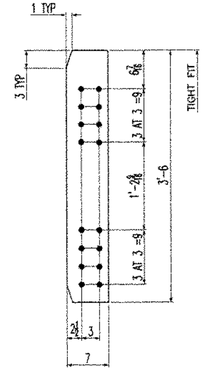


ITEM x2pt (1 REQ'D)
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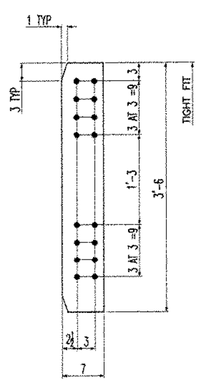


ITEM x2pv (2 REQ'D)
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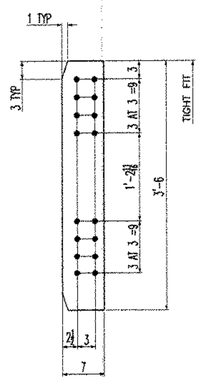


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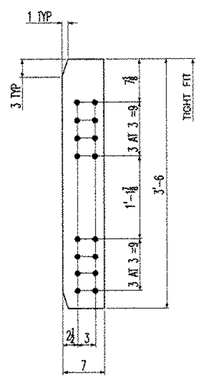


ITEM x2pz (1 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)

☑ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and
☐ Submit

This review is for general conformance with the design concept of the project and general compliance with the Construction Documents. Contractor remains responsible for all dimensions to be confirmed and correlated at the jobsite; for all fabrication processes and techniques of construction; coordination of his work with that of all other trades and for performing all work in a safe and satisfactory manner.

Eastern Bridge, LLC
SHOP DRAWINGS APPROVED AS NOTED
12-17-03

Eastern-Johnson, Inc.
Date 12-17-03
By RSW
RESERVED FOR STAMPS

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 | 12/21/03 | F.W. Whitcomb Construction | Approval |

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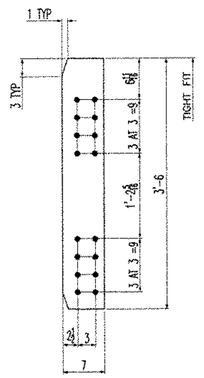
This drawing shall not be used or reproduced in any manner, nor shall any similar drawings or structures be made therefrom, nor shall the information thereon be used for any purpose other than that for which it is released without the written consent of an officer of EASTERN BRIDGE LLC

EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

| | |
|---|---|
| PROJECT: | BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER |
| LOCATION: | CHESTER, VERMONT |
| ENGINEER: | McFARLAND-JOHNSON, INC. |
| CUSTOMER: | EASTERN BRIDGE LLC |
| DRAWING TITLE: | DETAILS |
| DRAWN BY: D.B. 10/22/03 | JOB NUMBER: 4065 |
| CHECKED BY: L.D. 11/14/03 | SHEET NUMBER: X2 |

11855

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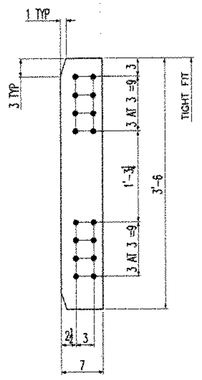


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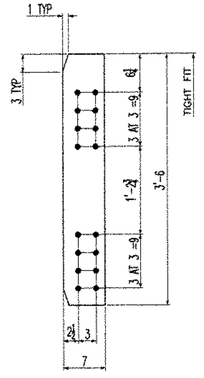


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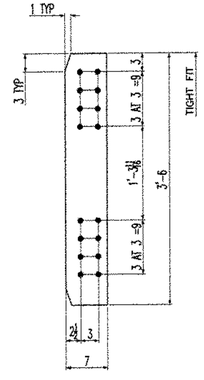


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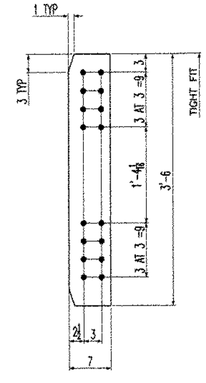


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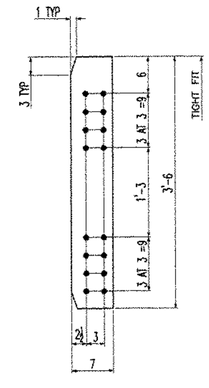


ITEM x3pg (2 REQ'D)
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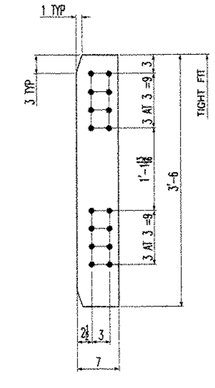


ITEM x3ph (1 REQ'D)
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ITEM x3pk (1 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)




ITEM x3pm (1 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)




ITEM x3pn (1 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)




ITEM x3pp (1 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)




ITEM x3pr (1 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)




ITEM x3ps (1 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)




ITEM x3pt (1 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)

NOTES:
1- GENERAL NOTES: SEE DRAWING GN1
2- HOLES : 15/16ø (U.N.O.)




ITEM x3pv (1 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)




ITEM x3py (1 REQ'D)
SCALE: 1"=1'-0" (PL½x7x3'-6) (12)




ITEM x3pz (1 REQ'D)
SCALE: 1"=1'-0" (PL¼x4x1'-2½) (23)

NOTICE
This drawing shall not be used or reproduced in any manner, nor shall any similar drawings or structures be made therefrom, nor shall the information thereon be used for any purpose other than that for which it is released without the written consent of an officer of EASTERN BRIDGE LLC.

☑ Reviewed
☐ Rejected
☐ Furnish as Corrected
☐ Revise and Resubmit
☐ Submit Spec.

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Date 12-17-03
By RSW

RESERVED FOR STAMPS

EASTERN BRIDGE, LLC
SHOP DRAWINGS REVIEWED
DATE 12-17-2003

DRAWINGS PREPARED BY:
AMEC E&C SERVICES LTD, 4765 1ST AVENUE, SUITE 120, CHARLESBOURG (QUEBEC), CANADA G1H 2T3 #030731-EAS

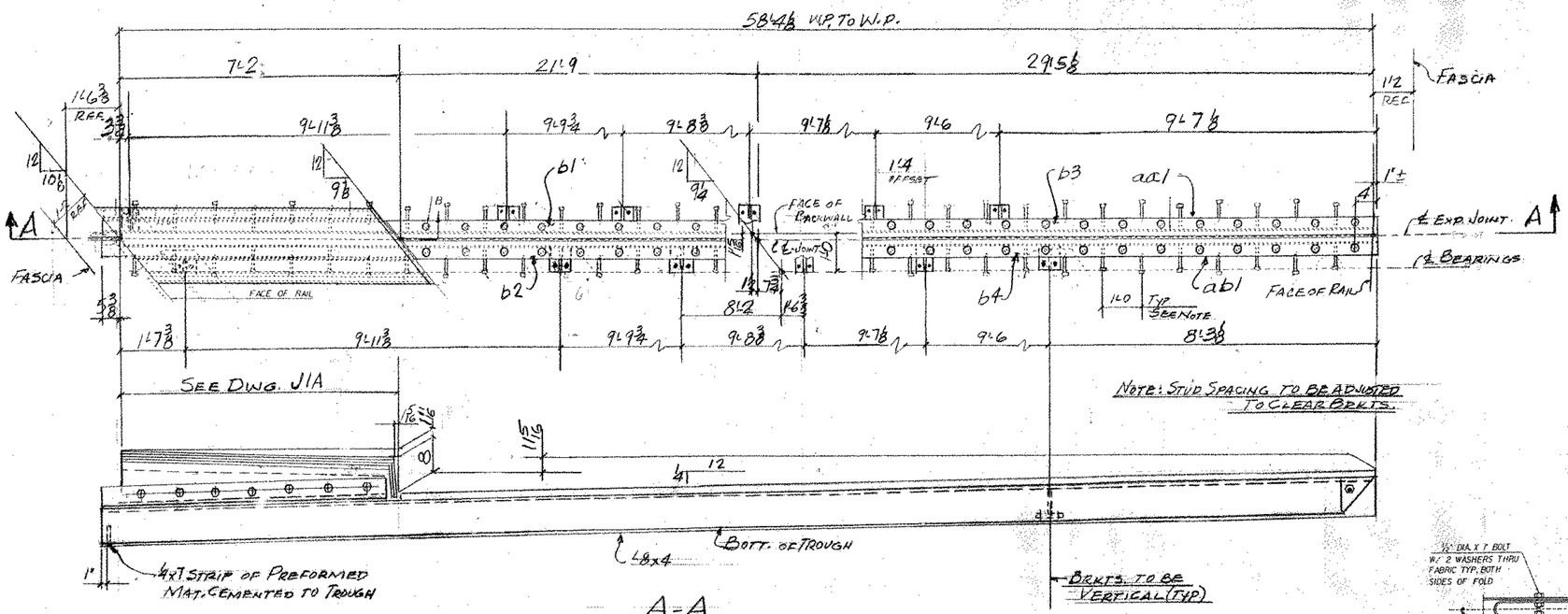
| REV | DATE | DESCRIPTION |
|---|---|---|
| △ | | |

| QTY | DATE | ISSUED TO | FOR |
|---|---|---|---|
| 8 | 11/17/03 | FRANK W. WHITCOMB CONSTRUCTION CO. | APPROVAL |

EASTERN BRIDGE LLC
RURAL RTE 2, BOX 302
CLAREMONT, NH 03743
603-542-5202

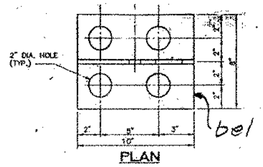
PROJECT: BRIDGE #12 VT 103-TH OVER WILLIAMS RIVER
LOCATION: CHESTER, VERMONT
ENGINEER: McFARLAND-JOHNSON, INC.
CUSTOMER: EASTERN BRIDGE LLC
DRAWING TITLE: DETAILS
DRAWN BY: D.B. 10/28/03
CHECKED BY: L.D. 11/14/03
JOB NUMBER: 4065
SHEET NUMBER: X3

11955

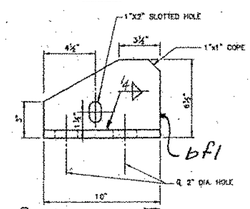



## A-A

## EJ2 - ONE REQ'D (@ABUT. No. 2)

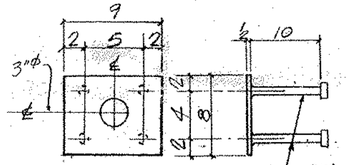



PLAN

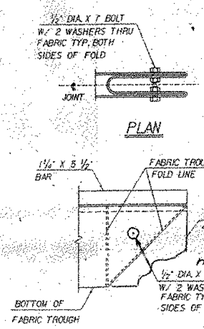



BRACKET DETAILS

PRIOR TO GALVANIZING, ALL CORNERS & EDGES OF STEEL L's - SHAPES, ETC. SHALL BE GROUND TO ⅛" RADIUS




API-6 REQ'D
DO NOT GALVANIZE

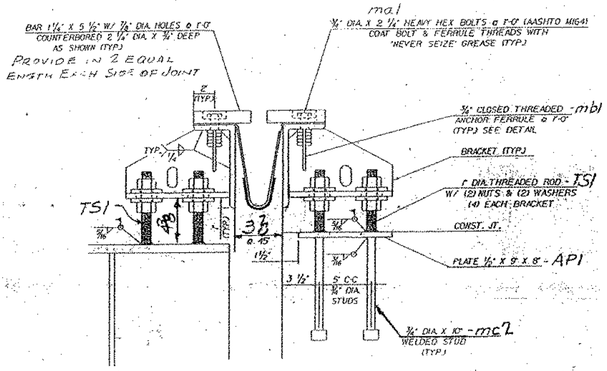



PLAN

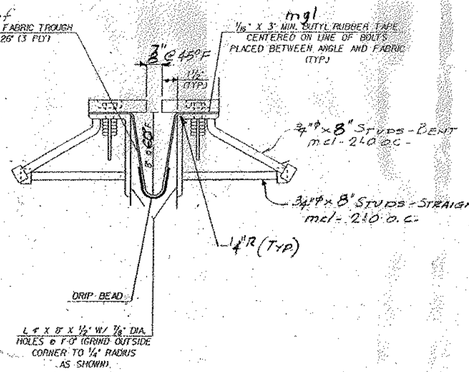



ELEVATION

FOLDED TROUGH END DETAILS

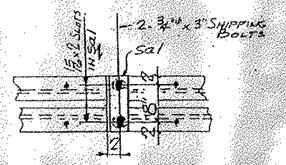



TYPICAL SECTION AT BEAMS



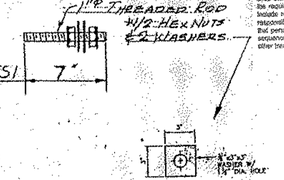

TYPICAL SECTION BETWEEN BEAMS

ANCHOR FERRULE




SHIPPING DEVICE
SPACED 540. O.C. MAX. (10 REQ'D)

WORK THIS DWG. W/ DWG. J1A




WASHER FOR BRACKET
W l

Reviewed
Rejected
Furnish as Corrected
Revise and Resubmit
Submit Specified Item

This review is only for general conformance with the design concept and the information given in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve the contractor from compliance with the requirements of the plans and specifications. Review of a specific item shall not include review of an assembly of which the item is a component. The Contractor is responsible for dimensions to be confirmed and correlated at the jobsite, information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences and procedures of construction, coordination of the work with that of all other trades and performing all work in a safe and satisfactory manner.

MacKenzie-Johnson, Inc.
Date 5-6-04
By Steven F. DeLa

## ABM INFO — SHOP BILL

JOB NO. 230 — DRG. NO. J1

| PAGE | LINE | NO. | DESCRIPTION | FT. | IN. | ASSEM. MARK | SHIPPING MARK | REMARKS | WEIGHT |
|---|---|---|---|---|---|---|---|---|---|
| | | 1 | EXP. JOINT ASS'Y | 58 | 0± | | EJ2 | | — |
| | | 1 | L 8x4x½ | 58 | 9± | a a1 | | | |
| | | 1 | DO | 58 | 9± | a b2 | | | |
| | | 1 | BAR 5½x14 | 26 | 0± | b1 | | | |
| | | 1 | DO | 25 | 6± | b2 | | | |
| | | 1 | DO | 29 | 6± | b3 | | | |
| | | 1 | DO | 25 | 6± | b4 | | | |
| | | 12 | PL ½x8 | | 10 | b e l | | | |
| | | 12 | PL ½x6 | | 10 | b f l | | | |
| | | 101 | ¾"Φ H.S. BOLTS | | 24 | m a l | | | |
| | | 101 | ¾"Φ THREADED ANC. FERRULES | | | m b l | | | |
| | | 1/8 | ¾"Φ ANC. STUDS | | 8 | m c l | | | |
| | | 1 | PREFORMED FABRIC TROUGH ⅛"x 28" | 60 | 0 | m f l | | SPLICE PER DWG. J1A-01 | |
| | | 2 | BUTYL RUBBER TAPE ½"x3" | 60 | 0 | m g l | | AASHTO TYPE II | |
| | | 2 | ¾" M. BOLTS | | 1 | m h l | | ¾" M.F. WASHER | |
| | | 6 | PL ½x8 | | 9 | | API | } HOT DIP GALV. | |
| | | 24 | ¾"Φ ANC. STUDS | | 10 | m c 2 | | | |
| | | 48 | 1"Φ THREADED STUD | | 7 | | T S l | | |
| | | 96 | 1" HEX NUTS | | | SHOP | | | |
| | | 96 | BAR 3x⅜ | | 3 | W l | | | |
| | | 10 | L 4x4x⅜ | 1 | 0 | a a l | | | |
| | | 20 | ¾"Φ H.S. BOLTS | | 3 | SHOP | | | |
| | | | SIDEWALK ASS'Y. (DWG. J1A) | | | | | | |
| | | 1 | PL ½x19 | 8 | 6± | s p l | | SLIP NOT FINISH | |
| | | 1 | PL ½x3 | 7 | 4± | s p 2 | | DO | |
| | | 1 | PL ½x8½ | 2 | 1½ | s p 2 a | | | |
| | | 1 | PL ½x4 | | 8± | s p 2 a | | | |
| | | 1 | PL ½x7 | 7 | 8± | s p 3 | | | |
| | | 1 | PL ½x8 | | 9⅜ | s p 3 a | | | |
| | | 1 | PL ½x11 | 7 | 1± | s p 4 | | | |
| | | 1 | DO | 7 | 1± | s p 5 | | | |
| | | 1 | L 6x4x½ | 7 | 0 | a a 1 | | | |
| | | 1 | DO | 7 | 4 | a a 2 | | | |
| | | 1 | L 2½x2½x3⅜ | 7 | 0± | a a 3 | | | |
| | | 28 | ¾"Φ H.S. BOLTS | | 24 | m a l | | | |
| | | 35 | ¾"Φ THREADED ANC. FERRULES | | | m b l | | | |
| | | 14 | ¾"Φ ANC. STUDS | | 6 | m c 3 | | | |
| | | 7 | ¾"Φ FLAT HEAD CUTTER COLD SCREWS | | 24 | m k l | | ASTM F835-98 | |
| | | | PAY ITEM 516.10 | | | | | | |

| | |
|---|---|
| OUT FOR APPROVAL | 3-24-04 |
| OUT FOR APPROVAL Final | 4-14-04 |
| ISSUED TO SHOP | |
| FIELD & OFFICE | |

| REV. | REMARKS | DATE | DWN | CHK | APP | Q.A. | NO. | DIA. | LGT | TYPE | WASHER |
|---|---|---|---|---|---|---|---|---|---|---|---|

PROJECT NO. BRF 025-1(35) — STATE PROJECT NO. 2

MATERIAL AASHTO M270-GR36 — ELECTRODES: PER FABC. — HOLES: AS NOTED — SHOP BOLTS: ¾"Φ A325 TYPE 1 - SMY

SURFACE PREP. & PAINT: GALVANIZE AFTER FAB. - ASTM-A123

DESCRIPTION: EXP. JOINT - ABUT. No. 2

JOB: VT 103 OVER WILLIAMS RIVER CHESTER VT.

CUSTOMER: F.W. WHITCOMB CONSTR.

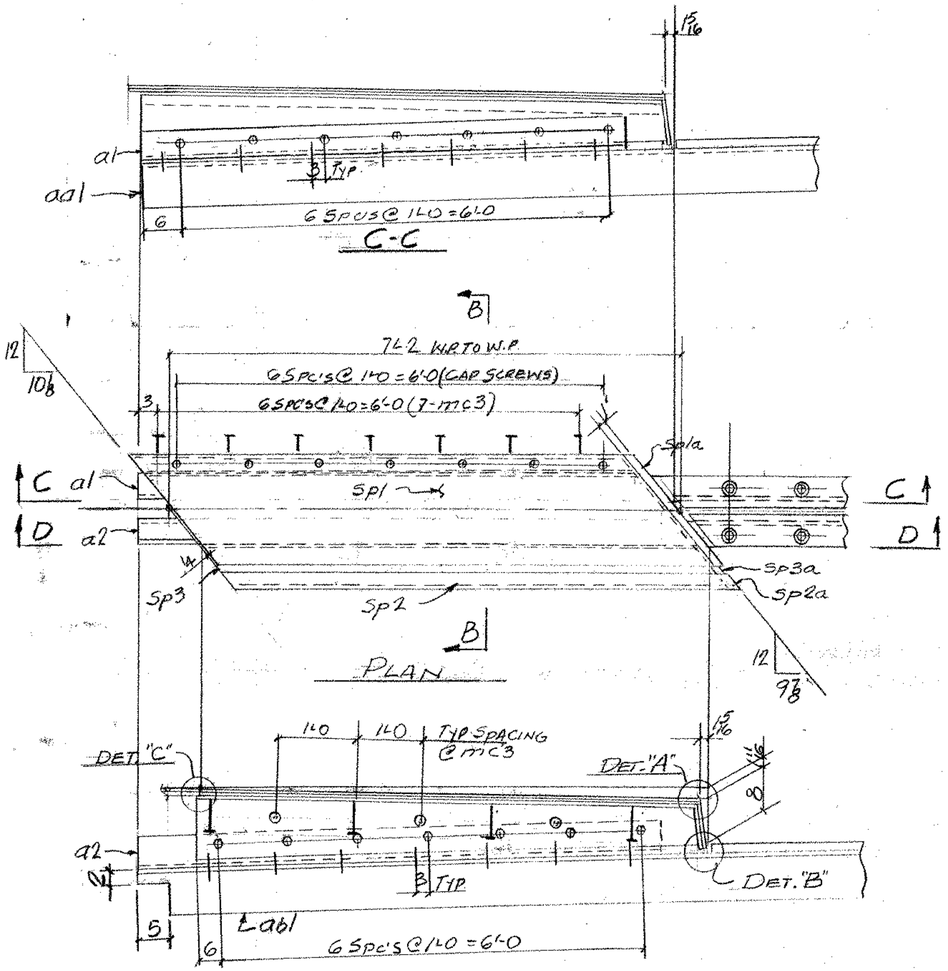
| DRAWN BY | DATE |
|---|---|
| JPF | 3-04 |
| CHKD BY | |
| EJ | |
| APPROV BY | |
| | |
| Q.A. | |

**CASCO BAY STEEL STRUCTURES, INC.**
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 230 — DRG. NO. J1 — REV. △

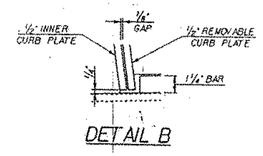
120 EJ

JOB NO. 230 | DRG. NO. J1A

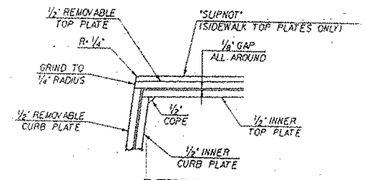



D-D.

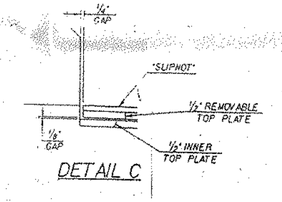
3/8 x 2" SLOTS IN BOTH LEGS OF a1 & a2



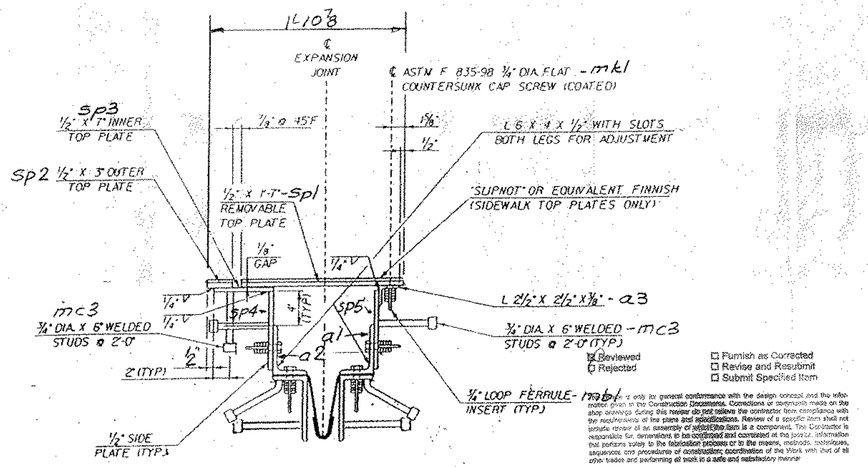

DETAIL B




DETAIL A




DETAIL C




Reviewed
Rejected
Furnish as Corrected
Revise and Resubmit
Submit Specified Item

Review is only for general conformance with the design concept and the information given in the Contract Documents. Corrections or comments made on the shop drawings during this review do not relieve the contractor from compliance with the requirements of the plans and specifications. Review of a specific item shall not include review of an assembly of which the item is a component. The Contractor is responsible for dimensions to be confirmed and correlated at the jobsite, information that pertains solely to the fabrication processes or to the means, methods, techniques, sequences, and procedures of construction, coordination of the Work with that of all other trades and performing all work in a safe and satisfactory manner.

McFarland-Johnson, Inc.
Date 5/6/04
By Steven F. Dolin

WORK THIS DWG. W/DWG J1

| REV. | REMARKS | DATE | DWN | CHK | APP | Q.A. | NO. | DIA. | LGT | TYPE | WASHER |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | OUT FOR APPROVAL | 3-24 | ON | | | | | | | | |
| | OUT FOR APPROVAL Final | 4/4/04 | | | | | | | | | |
| | ISSUED TO SHOP | | | | | | | | | | |
| | FIELD & OFFICE | | | | | | | | | | |

PROJECT NO. BRF 025-1(35) STATE PROJECT NO. 2

MATERIAL AASHTO M270-GR36 | ELECTRODES: PER PROC. | RULES: AS NOTED | SHOP BOLTS: 3/4" A325-TYPE1 GALV.

SURFACE PREP. & PAINT:

GALVANIZE AFTER FAB-ASTM-A123

DESCRIPTION: EXP. JOINT-ABUT. NO. 2.

JOB: VT 103 OVER WILLIAMS RIVER CHESTER VT.

CUSTOMER: E.W. WHITCOMB CONSTR.

| DRAWN BY | DATE |
|---|---|
| JPF | 3-04 |
| CHKD BY | |
| EJ | ✓ |
| APPROV BY | |
| | |
| Q.A. | |
| | |

**CASCO BAY STEEL STRUCTURES, INC.**
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PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 230 | DRG. NO. J1A | REV. △

121 ES