STATE OF VERMONT
AGENCY OF TRANSPORTATION

INDEX OF SHEETS

LIST OF STANDARDS

E-3	12-15-78R
E-4	3-4-81R
E-7	2-2-83R
E-7A	4-8-82R
G-1	12-21-84R
G-1d	12-21-84R
SB-R6-82	12-13-84R
SCB-D1-75	9-14-81R
SCB-D6-73	1-3-79R

Date MAY 31 1985

H. A. Manosh Corp
Contractor

Howard A. Manosh
Signature

President
Title

Susan C Crampton
Transportation Secretary's
Signature

GENERAL NOTES

1. THE GENERAL NOTE PERTAINING TO SPECIFICATIONS, MATERIALS, AND CONSTRUCTION IS SHOWN ON STANDARD DRAWING SCB-D1-75. OTHER GENERAL NOTES ON THE STANDARD, NOT OTHERWISE SHOWN OR MODIFIED ON THESE PLANS, ARE NOTES 6, 7, AND 15.
2. TRAFFIC SHALL BE MAINTAINED ON TOWN HIGHWAY # 4 UNDER THE ITEM "MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS". THE COST OF ALL REQUIRED SIGNS AND BARRICADES SHALL BE INCLUDED IN THIS ITEM. TOWN HIGHWAY # 5 MAY REMAIN CLOSED TO TRAFFIC UNTIL COMPLETION OF THE PROJECT.
3. ALL IN-STREAM CONSTRUCTION SHALL BE CONDUCTED DURING THE PERIOD FROM JUNE 1 TO OCTOBER 1.
4. THE EXISTING BRIDGE SHALL BE REMOVED UNDER THE ITEM "REMOVAL OF STRUCTURE". THIS INCLUDES THE SUPERSTRUCTURE AND PORTIONS OF THE SUBSTRUCTURE NOT REMOVED UNDER THE "STRUCTURE EXCAVATION" AND "UNCLASSIFIED CHANNEL EXCAVATION" LIMITS.
5. TURF ESTABLISHMENT SHALL BE SUBSIDIARY TO ALL OTHER CONTRACT ITEMS.
6. ALL EXTRA REINFORCING STEEL CUT-OFFS SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
7. WATER REPELLENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF THE DECK BETWEEN DRIP NOTCHES.
8. THE BRIDGE RAILING AND ROADWAY APPROACH RAILING SHALL BE TYPE 4, CORROSION RESISTANT STEEL.

PROPOSED IMPROVEMENT
BRIDGE PROJECT

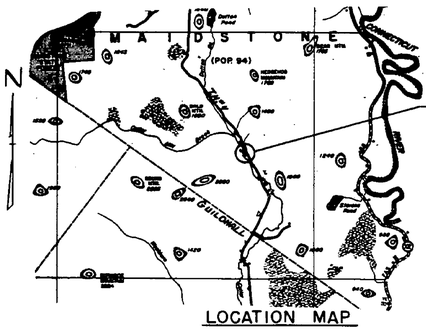
TOWN OF MAIDSTONE
COUNTY OF ESSEX

ROUTE NO: T.H. 5 CLASS 3 BRIDGE NO: 6

PROJECT LOCATION: Beginning At The Intersection Of T.H. # 4 And T.H. # 5, Approximately 3.5 Miles North Of The Intersection Of T.H. # 4 And Vt. Rt. 102, And Extending 0.038 Miles Along T.H. # 5.

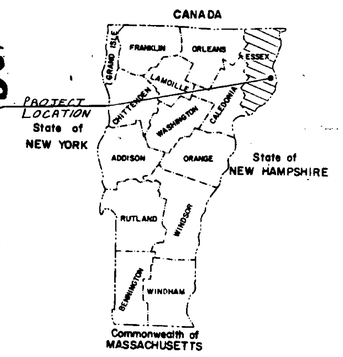
PROJECT DESCRIPTION: Construction Of A New Concrete Slab Bridge And Related Roadway And Channel Work.

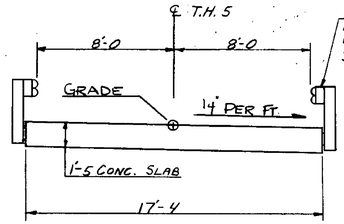
LENGTH OF STRUCTURE:	25.09 FEET
LENGTH OF T.H. # 5 ROADWAY:	174.91 FEET
LENGTH OF NON-PARTICIPATION ROADWAY:	——— FEET
LENGTH OF T.H. # 5:	200.00 FEET
LENGTH OF T.H. # 4:	250.00 FEET
TOTAL LENGTH OF PROJECT:	450.00 FEET



LOCATION MAP
(TRACED FROM COUNTY MAP)

SCALE
0 1 MILE

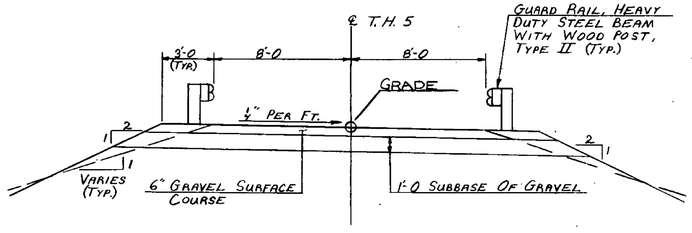




TYPICAL BRIDGE SECTION
SCALE 1/4" = 1'-0

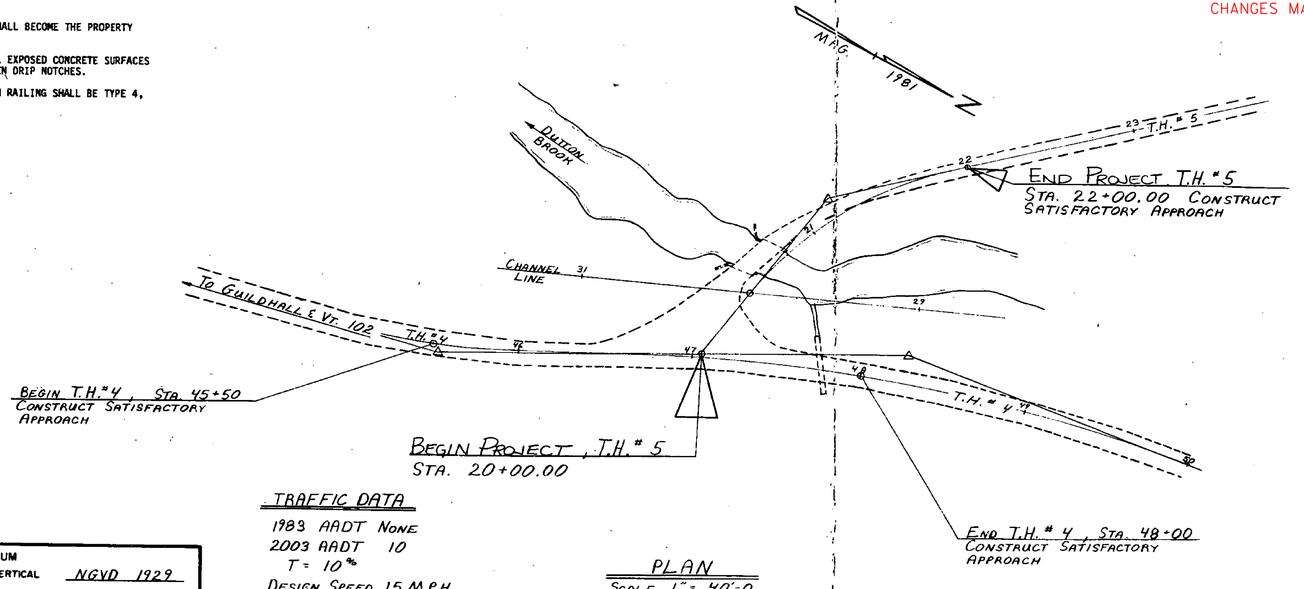
CONTRACT PLANS

THESE PLANS DO NOT REFLECT CHANGES MADE ON THE PROJECT.



TOWN HIGHWAY NO. 5
TYPICAL ROADWAY SECTION
SCALE 1/4" = 1'-0

(SEE SHEET 7 FOR TH # 4 TYPICAL SECTION)



PLAN
SCALE 1" = 40'-0

CONVENTIONAL SIGNS

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

DRAWING 44-131 #09921

DATUM
VERTICAL NGVD 1929
HORIZONTAL N.A.

TRAFFIC DATA
1983 AADT None
2003 AADT 10
T = 10%
Design Speed 15 M.P.H.

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

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

SUBMITTED BY ORDER OF THE STATE TRANSPORTATION BOARD
APPROVED [signature] DATE MAY 31 1985
ACTING DIRECTOR OF ENGINEERING AND CONSTRUCTION

PROJECT	PROJECT NO.
MAIDSTONE	BRZ 1447(4)

SHEET 1 OF 31 SHEETS
0-10 SJB 7/21/81

EARTHWORK

V.C.	% GRD	STATION	GRADES ELEVATION ON TAN.	ELEVATION ON V.C.	CORR. V.C.	DIST.	COMMON EXCAVATION AREA	COMMON EXCAVATION CU. YDS.	SUBBASE OF GRAVEL AREA	SUBBASE OF GRAVEL CU. YDS.	GRAVEL SURFACE COURSE AREA	GRAVEL SURFACE COURSE CU. YDS.	EARTH BORROW AREA	EARTH BORROW CU. YDS.
		MAINLINE STA (T.H.# 5)												
		STA 20+00.00 BEGIN PROJECT, CONSTRUCT SATISFACTORY APPROACH												
		20+00	1007.05				5		10		5		0	
PVC	-3.586%	20+07.97	1007.16	EDGE OF TH# 4		10								
		20+10	1007.09	1007.09	0.00			14		25		12		0
		+25	1006.55	1006.78	*0.23	15	25		45		20		0	
PVI	X	+30	1006.37	1006.78	*0.41	5		32		35		16		0
PVT		+50	1007.29	1007.29	0.00	20	45		30		15		0	
		BEGIN BRIDGE				8.82		12		9		4		0
		20+58.82	1007.69				30		22		11		0	
		20+83.91	1008.84				0		22		11		15	
	+4.572%	END BRIDGE				16.09		0		14		7		6
		21+00	1009.57				0		26		11		5	
		+25	1010.71			25	0	0	27	25	12	11	40	21
PVC		+50	1011.86	1011.36	0.00	25	5	2	27	25	12	11	15	25
PVI	X	+75	1013.00	1013.44	*0.71	25	35	19	25	24	10	10	25	19
PVT		22+00	1015.90	1015.90	0.00	25	30	30	20	21	10	9	0	12
	+11.600%	STA 22+00 END PROJECT, CONSTRUCT SATISFACTORY APPROACH												
								109		178		80		83
				ROUND OFF				1		2		-		7
				T.H.# 5	TOTAL			110		180		80		90
		T.H.# 4 STA												
		STA 45+50 BEGIN T.H.# 4, CONSTRUCT SATISFACTORY APPROACH												
		44+50	1006.65	MATCH EXISTING GRADE		50								
		45+00	1006.40			50	0	0	0	2			0	
PVC	+0.733%	+50	1006.77	1006.77	0.00	50	0	0	10	9	9	10	0	0
		46+00	1007.13	1007.05	-0.08	50	0	0	15	23	9	17	0	0
PVI	X	+50	1007.50	1007.15	-0.35	50	0	0	20	32	9	17	0	0
		+75	1007.33	1007.13	-0.20	25	0	0	22	19	13	10	0	0
	-0.687%	47+00	1007.16	1007.07	-0.09	25	0	0	10	15	10	11	0	0
PVT		+50	1006.82	1006.82	-0.00	50	0	0	15	23	13	21	0	0
		48+00	1006.47			50	0	0	3	17	3	15	0	0
		+50	1006.34			50								
		49+00	1006.26	MATCH EXISTING GRADE		50								
		STA 48+00 END T.H.# 4, CONSTRUCT SATISFACTORY APPROACH												
							0		138		101		0	
				ROUND OFF			-		2		9		-	
						TH# 4	0		140		110		0	
						TH# 5	110		180		80		90	
						PROJECT TOTAL	110		320		190		90	

EARTHWORK SUMMARY

PLANIMETERED FILL	90 x 1.15	104	(REQ'D.)
MATERIAL AVAILABLE FOR FILL:			
COMMON EXCAVATION	110 x 1	110	
UNCL. CHANNEL EX.	350 x 0.60	210	
STRUCTURE EXCAV.	360 x 0.60	216	
TOTAL		536	
TOTAL AVAILABLE FILL		536	
TOTAL FILL REQ'D		104	
WASTE		432	

BRIDGE QUANTITY SHEET

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS
BRIDGE DIVISION

NO.	ITEM	UNIT	QUANTITY BREAKDOWN SLAB	ABUT. #1	ABUT. #2	T.H. #5	T.H. #4	CHANNEL	TOTAL	FINAL
202.25	REMOVAL OF STRUCTURE	EACH	1						1	
203.15	COMMON EXCAVATION	C.Y.				110			110	
203.27	UNCLASSIFIED CHANNEL EXCAVATION	C.Y.						350	350	
204.25	STRUCTURE EXCAVATION	C.Y.		140	220				360	
204.30	GRANULAR BACKFILL FOR STRUCTURES	C.Y.		120	160				280	
301.15	SUBBASE OF GRAVEL	C.Y.				180	140		320	
401.10	GRAVEL SURFACE COURSE	C.Y.				80	110		190	
501.25	CONCRETE, CLASS B	C.Y.	25	56	98				179	
507.15	REINFORCING STEEL	LB.	3,630	6,680	8,490				18,800	
514.10	WATER REPELLENT	GAL.	5	4	5				14	
608.25	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	HR					8		8	
613.12	STONE FILL, TYPE III	C.Y.						310	310	
617.35	BRIDGE RAILING, HEAVY DUTY STEEL BEAM, TYPE D POST (TYPE 4 BEAM RAIL)	L.F.	64						64	
621.38	GUARD RAIL, HEAVY DUTY STEEL BEAM WITH WOOD POST, TYPE II (TYPE 4 BEAM RAIL)	L.F.				181			181	
621.70	ANCHOR FOR STEEL BEAM GUARD RAIL WITH STEEL OR WOOD POSTS @ OPENINGS	EACH				2			2	
635.10	MOBILIZATION	L.S.				1			1	
637.10	MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS	L.S.					1		1	

BRIDGE (S) AT STATION (S) 20+71
LOCATION (S) T.H. 5 OVER DUTTON BROOK

Prepared by: D.E. WILLEY | Checked by: M.J. POLOGRUTO
SUPERVISOR: R.S. HAUPT

MAIDSTONE
BR.# 6

PROJECT NO. BRZ 1447 (4)
SHEET NO. 2 OF 31

Note (From survey notes)
Town of Maidstone's Road Commissioner told survey party, that in the spring of 1980, 1981 the brook backed up due to ice at present bridge site. Ice went down road leaving 3 foot [illegible] road.
Road Commissioner
Harold [illegible]
Tel 676-[illegible]12

Anchor For Steel Beam Guard Rail With Steel Or Wood Post, @ Openings

Sta. 20+29 Lt.
Sta. 20+41 Rt.

Bridge Data

Single Span
I-Beam, plank deck
Log abutments
Roadway Length 24.7' ±
Width 12'
Span 21'
Span 90° to abut 19' ±
Clear spans
Upstream 8.5'
Downstream 10.5
I-Beams
4-8" x 4" x 28'
3-10" x 5" x 28'

Bridge Railing, H.D. Steel Beam, Type D

Sta. 20+54 ~ 20+84 Lt.
Sta. 20+58 ~ 20+91 Rt.

Relocated T.H. 5 Curve 1 Curve Data

Δ 39°-14' Rt.
D 28°
R 204.63'
T 72.93'
L 140.12'
E 12.61'
Banking

Guard Rail, H.D. Steel Beam With Wood Post, Type II

Sta. 20+29 ~ 20+54 Lt.
Sta. 20+84 ~ 21+14 Lt.
Sta. 20+41 ~ 20+58 Rt.
Sta. 20+91 ~ 21+50 Rt.

MAG 1981

BM 5
RRSIR 10" Map
28' Lt 23+67
Elev 1048.44

BM 4
RRSIR 18" Bal
30' Lt 21+60
Elev 1015.95

End Project Sta. 22+00.00
Construct Satisfactory Approach

Existing R.O.W.

T.H. – 5

Relocated TH-5 PC 20+47.09 = Chan BL 30+00.00 Δ 57°-53' Rt.

End Bridge
Sta. 20+83.91
F.G. = 1008.84

3'0 Stone Fill, Type III (Typ.)

Relocated TH-5 PT 21+20.02 = TH-5 Trav. PT 11+44.04

Relocated TH 5 PT 21+87.21 = TH-5 Trav POT 12+16.97

Top of bank

Relocated TH-5 POT 23+52.16 TH-5 Trav POT 13+81.92

Relocated TH-5 23+48.3 a 57°-15' Lt. 10" x 18" CNP (Fair)

TH-4 POT 44+05.56

TH-4 PC-1 STA 44+80.64

CHAN BL POT 31+20.71

Dutton Brook

TH-4 PT-1 STA 46+20.36

Bridge Closed Sign

TH-4 POST 48+08.89

TH-4 PI-2 STA 48+27.22 AHD
Δ 22°-10' Rt = STA 48+22.78 BK.

To Guildhall & Vt. 102

Begin T.H. # 4, Sta 45+50.00
Construct Satisfactory Approach

Existing R.O.W.

T.H. – 4

TH-4, PI-1 STA 45+51.00 AHD =
Sta 45+50.00 Bk.
Δ = 16°-46' Lt.

BM 1
Disc on 3 cy bldr
21' Rt 45+62
Elev 1008.937

TH-4 POST 46+69.97 = TH-5 Trav. 10+00.00
Δ 41°-27' Lt.

Begin Bridge
Sta. 20+58.82
F.G. = 1007.69

TH-4 PC-2 STA 46+50.00

TH-4 POST 47+05.00 = Relocated TH-5 POT 20+00.00
Δ 52°-35'-50" Lt

Begin Project
T.H.5 Sta. 20+00.00
Construct Satisfactory Approach

BM 2
RRSIR 12" Spr
41' Rt 47+61
Elev. 1006.23

47+82.3 a 75°-15' Lt.
30" x 36" ACCGMP (Fair)

49+82.9 @ 83°-20' Lt.
15" x 20' ACCGMP (Fair)

End T.H. # 4, Sta. 48+00.00
Construct Satisfactory Approach

Guard Post

TH-4 PT-2 STA 50+00.00

T.H. # 4 Curve 1 Curve Data

Δ 16°-46' Lt.
D 12°
R 477.47'
T 70.36'
L 139.72'
E 5.16'
Banking

T.H. # 4 Curve 2 Curve Data

Δ 22°-10' Rt.
D 6°-20'
R 904.27'
T 177.22'
L 350.00'
E 17.19'
Banking

Scale 1" = 20'

DATUM
VERTICAL NGVD 1929
HORIZONTAL N/A

SURVEYED BY Fall DATE 7-81
DRAWN BY DeCell DATE 12-81
TRACED BY DeCell DATE 1-82

MAIDSTONE
PROJ. BRZ NO. 1447 (4)
SHEET 3 OF 31

Begin Project Sta. 20+00
Construct Satisfactory Approach
End Project Sta. 22+00
Construct Satisfactory Approach
Project Length = 200'
Begin Bridge Sta. 20+58.82
F.G. 1007.29
25.09'
End Bridge Sta. 20+83.91
F.G. 1008.84
+3.58%
+4.572%
+11.600%
20+00 EL. 1007.05
21+00 EL. 1009.57
PVC EL. 1011.86
PVT 22+00 EL. 1015.70
Relocated TH-3
PVT
Sta. 20+30
EL. 1006.37 on Tan
EL. 1006.78 on V.C.
L=40'
PVT
Sta. 21+75
EL. 1013.00 on Tan
EL. 1013.44 on V.C.
L=50'
Fill with Stone Fill, Type III
Main Line Profile
31+50
31+00
30+50
30+00
29+50
29+00
28+50
Channel Profile
1050
1040
1030
1020
1010
1000
990
Begin T.H. #4, Sta. 45+50
Construct Satisfactory Approach
End T.H. #4, Sta. 48+00
Construct Satisfactory Approach
PVT
Sta. 46+50
EL. 1007.50 on Tan.
EL. 1007.14 on V.C.
L = 200'
+0.733%
-0.681%
Match Existing Elevation
There may be an error in the original cross section as all shots left of centerline are about one foot below those on the right of station 48+50 only.
Scale
Horizontal 1" = 20'
Vertical 1" = 10'
44+50
45+00 EL. 1006.40
PVC EL. 1006.77
46+00 EL. 1007.03
PVI EL. 1007.14
47+00 EL. 1007.07
PVT EL. 1006.81
48+00 EL. 1006.46
EL. 1006.34
49+00
50+00
TH-4
Side Line Profile
Maidstone
BRZ 1447(4)
Sheet 4 of 31
PLAN
NOTE BOOK
PROFILE

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

TABLE OF PROJECT PROPERTY ACQUISITION

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
1	OXFORD PAPER COMPANY	5	TH4 47+27 LT. TH5 20+40 LT. TH5 22+10 RT.	TH4 48+50 LT. TH5 21+88 LT. TH5 22+70 RT.	0.16 A±		CONST. EASE. (T) (0.02 A±) CONST. EASE. (T) (180 S.F.±)	W.D.	12-12-84	MAIDSTONE	13	488	(700 S.F.±)

TABLE OF REVISIONS

REVISION NO.	SHEET NO.	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY
		Mylars to Structures 2-21-85			

MADE BY: D.E.M. DATE 8-10-84

CHECKED BY: F.J.M. DATE 8-10-84

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

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

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

APPROVED L. W. Blow DATE 8/13/85
CHIEF OF PLANS & TITLES

PROJECT MAIDSTONE
NO. BRZ 1447(4)
SHEET 5 OF 31

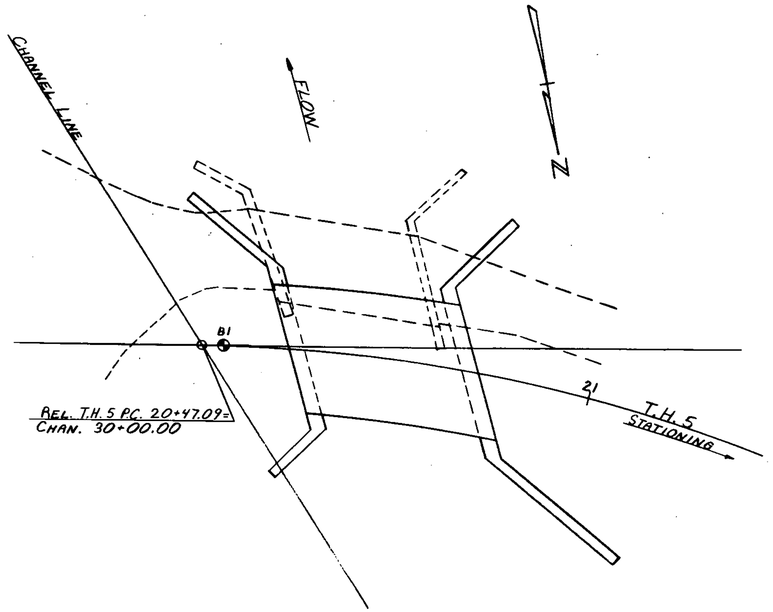
ROW

Note (From survey notes) Town of Maidstone's Road Commissioner told survey part, that in the spring of 1980, 1981 the brook backed up due to ice at present bridge site. Ice went down road leaving 3 feet of ice on road. Road Commissioner Harold Nutt Tel 676- 12
Bridge Data
Single Span
I-Beam, plank deck
Log abutments
Roadway Length 24.7'±
Width 12'
Span 21'
Span 90° to abut 19'±
Clear spans
Upstream 8.5'
Downstream 10.5
I-Beams
4-8" x 4" x 28'
3-10" x 5" x 28'
BRIDGE RAILING, H.D. STEEL BEAM, TYPE C
STA. 20+54 ~ 20+84 LT.
STA 20+58 - 20+91 RT.
Relocated T.H. 5 Curve 1
Curve Data
Δ 39°-14' Rt.
D 28°
R 204.63'
T 72.93'
L 140.12'
E 12.61'
Banking
GUARD RAIL, H.D. STEEL BEAM WITH WOOD POST, TYPE II
STA. 20+29 ~ 20+54 LT.
STA. 20+84 ~ 21+14 LT.
STA. 20+41 ~ 20+58 RT.
STA. 20+91 ~ 21+50 RT.
MAG 1981
BM 5 RRSIR 10" Map 28' Lt 23+67 Elev 1048.44
BM 4 RRSIR 18" Bal 30' Lt 21+60 Elev 1015.95
END PROJECT STA. 22+00.00 CONSTRUCT SATISFACTORY APPROACH
OXFORD PAPER COMPANY
Relocated TH-5 PC 20+47.09 = Chan BL 30+00.00 Δ 57°-53' Rt.
END BRIDGE STA. 20+83.91 F.G. 1009.83
3'0 STONE FILL TYPE III (TYP)
CONST. EASE (T)
T.H.-5
N 42° W
Top of bank
Relocated TH-5 POT 23+58 = TH-5 Trav POT 13+81.92
Relocated TH-5 23+48.3 @ 57°-15' Lt 10' x 18' CMP (Fair)
Relocated TH 5 PT 21+87.21 = TH-5 Trav POT 12+16.97
TH5 22+10 25' RT.
END R.O.W. PROJECT
BRZ 1447(4) STA. TH5 23+00 ℄
TH-4 POT 44+05.56
OXFORD PAPER COMPANY
Cutler Mill Brook
CHAN BL POT 31+20.71
TH-4 PC-1 STA 44+80.64
BM 3 RRSIT 12" Spr 36' Lt 46+75 Elev 1005.41
Bridge Closed Sign
OXFORD PAPER CO. ①
OXFORD PAPER COMPANY
BEGIN R.O.W. PROJECT
BRZ 1447(4) STA. TH4 48+50 25' LT.
N 11° W
To GUILDHALL & VT. 102
TH-4 PT-1 STA 46+20.36
T.H.-4
TH4 47+27 25' LT.
N 28° W
TH-4 POST 48+08.89
TH-4 PI-2 STA 48+27.22 AHD = STA 48+22.75 BK
N/F McLAIN
BEGIN T.H. # 4, STA 45+50.00 CONSTRUCT SATISFACTORY APPROACH
T.H.-4
N 6° W
49+82.9 @ 83°-20' Lt. 15' x 20' ACCGMP (Fair)
TH-4 POST 47+05.00 = Relocated TH-5 POT 20+00.00 Δ 52°-35'-50" Lt
TH-4, PI-1 STA 45+51.00 AHD = STA 45+50.00 BK Δ = 16°-46' LT
BM 1 Disc on 4cy bldr 21' Rt 45+62 Elev 1008.937
TH-4 POST 46+69.97 = TH-5 Trav. 10+00.00 Δ 41°-27' Lt.
BEGIN BRIDGE STA 20+59.82 F.G. 1007.68
BEGIN PROJECT T.H.5 STA. 20+00.00 CONSTRUCT SATISFACTORY APPROACH
47+82.3 @ 75°-15' Lt 30' x 36' ACCGMP (Fair)
TH-4 PC-2 STA 46+50.00
T.H. # 4 CURVE 1
CURVE DATA
Δ 16°-46' Lt.
D 12°
R 477.47'
T 70.36'
L 139.72'
E 5.16'
Banking
N/F McLAIN
BM 2 RRSIR 12" Spr 41' Rt 47+61 Elev. 1006.23
OXFORD PAPER COMPANY
T.H. # 4 CURVE 2
CURVE DATA
Δ 22°-10' Rt.
D 6°-20'
R 904.27'
T 177.22'
L 350.00'
E 17.19'
Banking
END T.H. # 4, STA. 48+00.00 CONSTRUCT SATISFACTORY APPROACH
TH-4 PT-2 STA 50+00.00
N/F McLAIN
SCALE 1" = 20'
DATUM
VERTICAL NGVD 1929
HORIZONTAL N/A
SURVEYED BY Fall DATE 7-81
DRAWN BY De Cell DATE 12-81
TRACED BY DeCell DATE 1-82
MAIDSTONE
BRZ 1447(4)
SHEET 6 OF 31

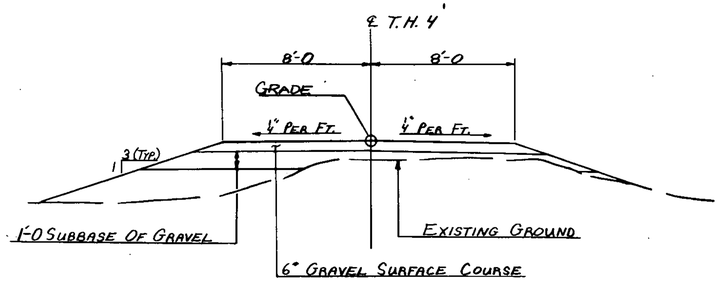
BORING NO. B-1

ELEV. 1006.7

DEPTH	BLOWS ON CASING OR STANDARD PENETRATION	SAMPLE NUMBER	MOISTURE	COLOR	LABORATORY CLASSIFICATION OF SOIL
	10				No Sample
	R				No Sample
10			W	Gr	
BOTTOM OF FOOTING EL. 993.00	81				No Sample
	57			Wht	A-1-b Gravelly Sand
20	R		M	Gr	A-4 Sandy Silt
					A-4 Sandy Silt
					A-1-b Gravelly Sand
	R				Hole stopped at 24.5' in H.P.
30					



BORING LAYOUT
SCALE 1" = 10'



TOWN HIGHWAY NO. 4
TYPICAL ROADWAY SECTION
SCALE ¼" = 1'-0

(SEE SHEET 1 FOR TH #5 TYPICAL SECTION)

BORING	STATION	OFFSET
B1	20+50	℄

BORING NOMENCLATURE

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

GENERAL NOTES

THE SUBSURFACE EXPLORATIONS SHOWN HEREON WERE MADE BETWEEN 11-3-82 AND 11-3-82 BY THE VERMONT AGENCY OF TRANSPORTATION.

1. SOIL AND ROCK (WHERE ENCOUNTERED) CLASSIFICATION, PROPERTIES AND DESCRIPTIONS ARE BASED ON ENGINEERING INTERPRETATION OF AVAILABLE SUBSURFACE INFORMATION BY THE VERMONT AGENCY OF TRANSPORTATION AND MAY NOT NECESSARILY REFLECT ACTUAL VARIATIONS IN SUBSURFACE CONDITIONS THAT MAY BE ENCOUNTERED BETWEEN INDIVIDUAL BORING OR SAMPLE LOCATIONS.

2. OBSERVED WATER LEVELS AND/OR WATER CONDITIONS INDICATED ARE AS RECORDED AT THE TIME OF EXPLORATION AND MAY VARY ACCORDING TO THE PREVAILING RAINFALL, METHODS OF EXPLORATION AND OTHER FACTORS.

3. SOUND ENGINEERING JUDGEMENT WAS EXERCISED IN PREPARING THE SUBSURFACE INFORMATION PRESENTED HEREON. ANALYSIS AND INTERPRETATION OF SUBSURFACE DATA WAS PERFORMED AND INTENDED FOR AGENCY DESIGN AND ESTIMATE PURPOSES ONLY. PRESENTATION OF THE INFORMATION ON THE PLANS OR ELSEWHERE IS FOR THE PURPOSE OF PROVIDING INTENDED USERS WITH ACCESS TO THE SAME DATA AVAILABLE TO THE AGENCY. THE SUBSURFACE INFORMATION IS PRESENTED IN GOOD FAITH AND IS NOT INTENDED AS A SUBSTITUTE FOR PERSONAL INVESTIGATION, INDEPENDENT INTERPRETATIONS, INDEPENDENT ANALYSIS OR JUDGEMENT OF THE CONTRACTOR.

4. PICTORIAL STRUCTURE DETAILS SHOWN HEREON ARE FOR ILLUSTRATIVE PURPOSES ONLY AND MAY NOT BE INDICATIVE OF THE FINAL DESIGN CONDITIONS SHOWN IN THE CONTRACT PLANS.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TOWN OF MAIDSTONE	Bridge No. 6
HIGHWAY NO. T.H. 5	Log Sta.
	Surv. Sta. 20+71
T.H. 5 OVER DUTTON BROOK BORING LOGS	
Designed by G. SPILAK	Drawn by D. WILLEY
Checked by A. ELWOOD date 12-84	Bridge Design Supervisor B.S. HAUPT date 11-83
PROJECT MAIDSTONE	PROJECT NO. BRZ 1447(4)
Bridge Sheet No.	Sheet 7 of 31

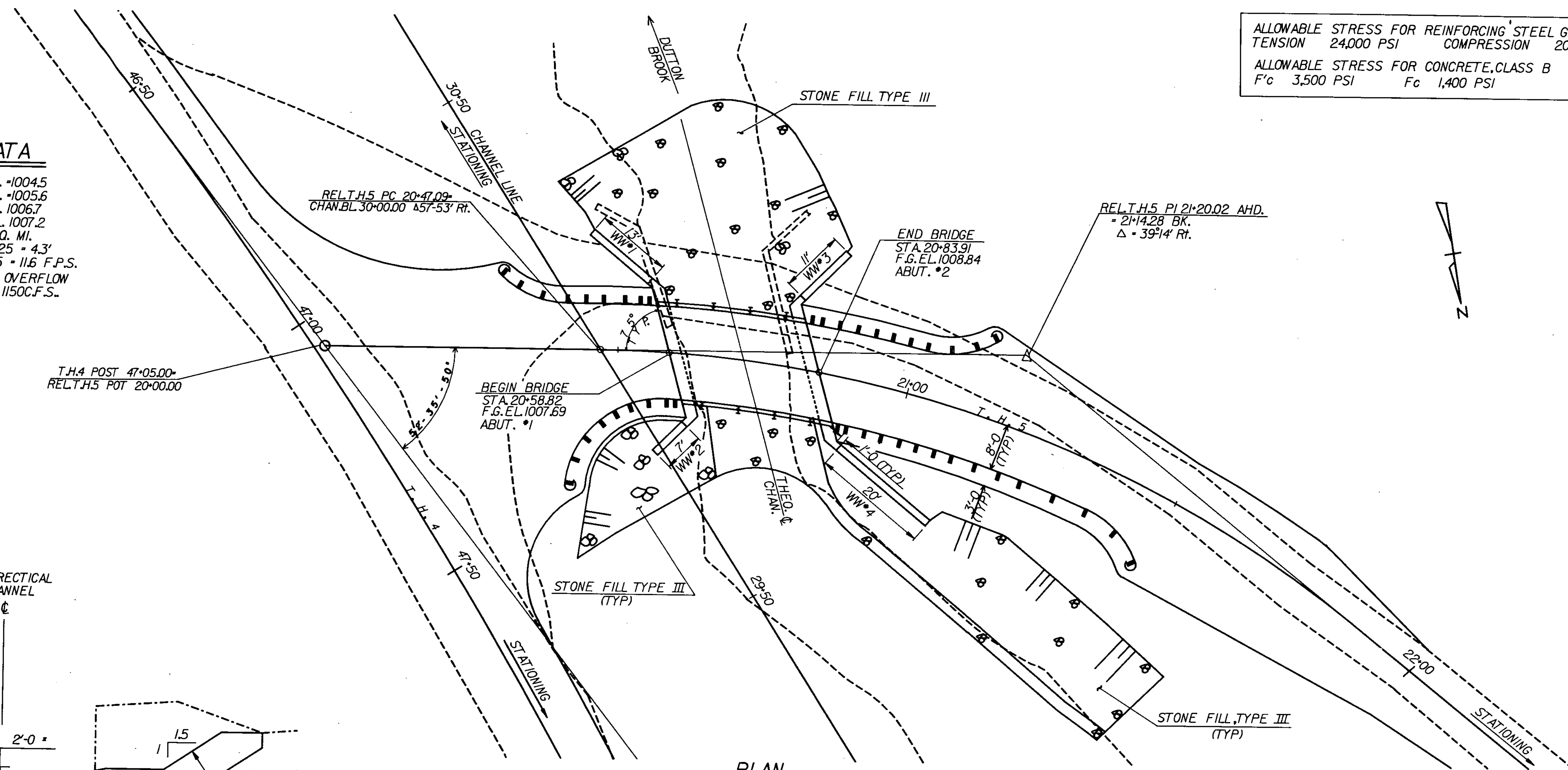
8-'83

ALLOWABLE STRESS FOR REINFORCING STEEL GRADE 60
TENSION 24,000 PSI COMPRESSION 20,000 PSI

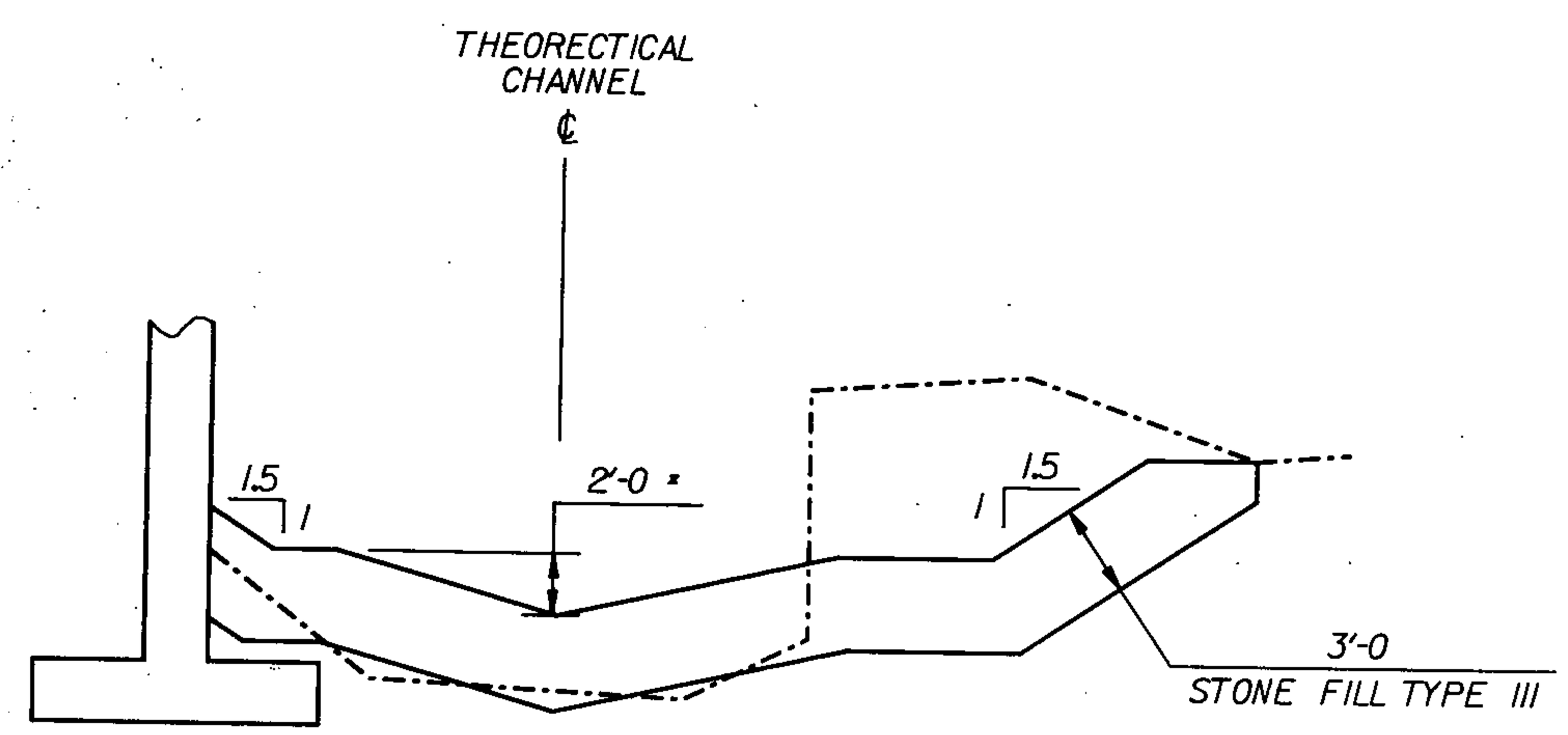
ALLOWABLE STRESS FOR CONCRETE, CLASS B
F'c 3,500 PSI Fc 1,400 PSI

HYDRAULIC DATA

Q10=750 CFS H.W. EL. =1004.5
Q25=1000 CFS H.W. EL. =1005.6
Q50=1250 CFS H.W. EL. 1006.7
Q100=1500 CFS H.W. EL. 1007.2
DRAINAGE AREA = 14.9 SQ. MI.
TAILWATER DEPTH @ Q25 = 4.3'
OUTLET VELOCITY @ Q25 = 11.6 F.P.S.
THE ROADWAY WILL NOT OVERFLOW UNTIL A Q40 OR ABOUT 1150C.F.S.

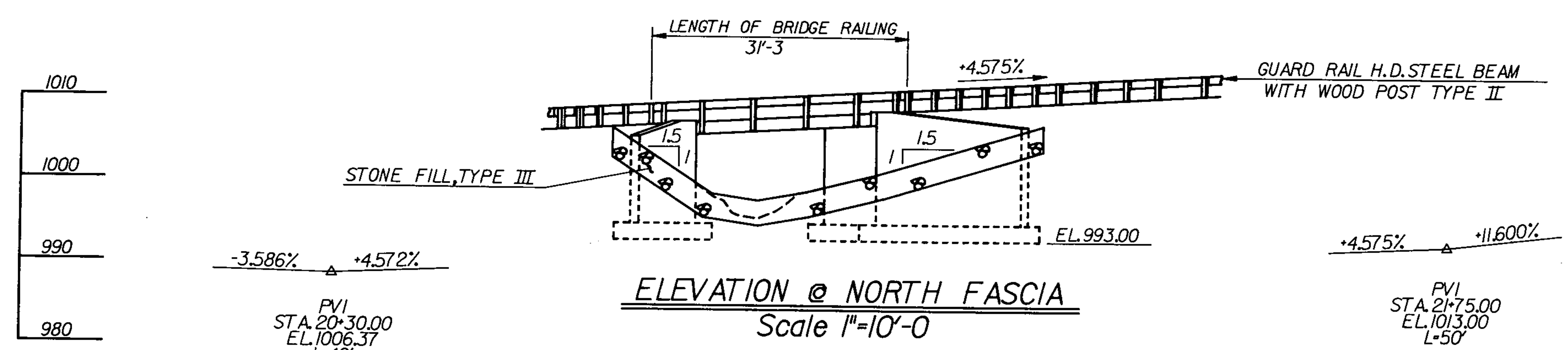


PLAN
SCALE 1"=10'-0



TYPICAL CHANNEL SECTION
Scale 1"=5'-0

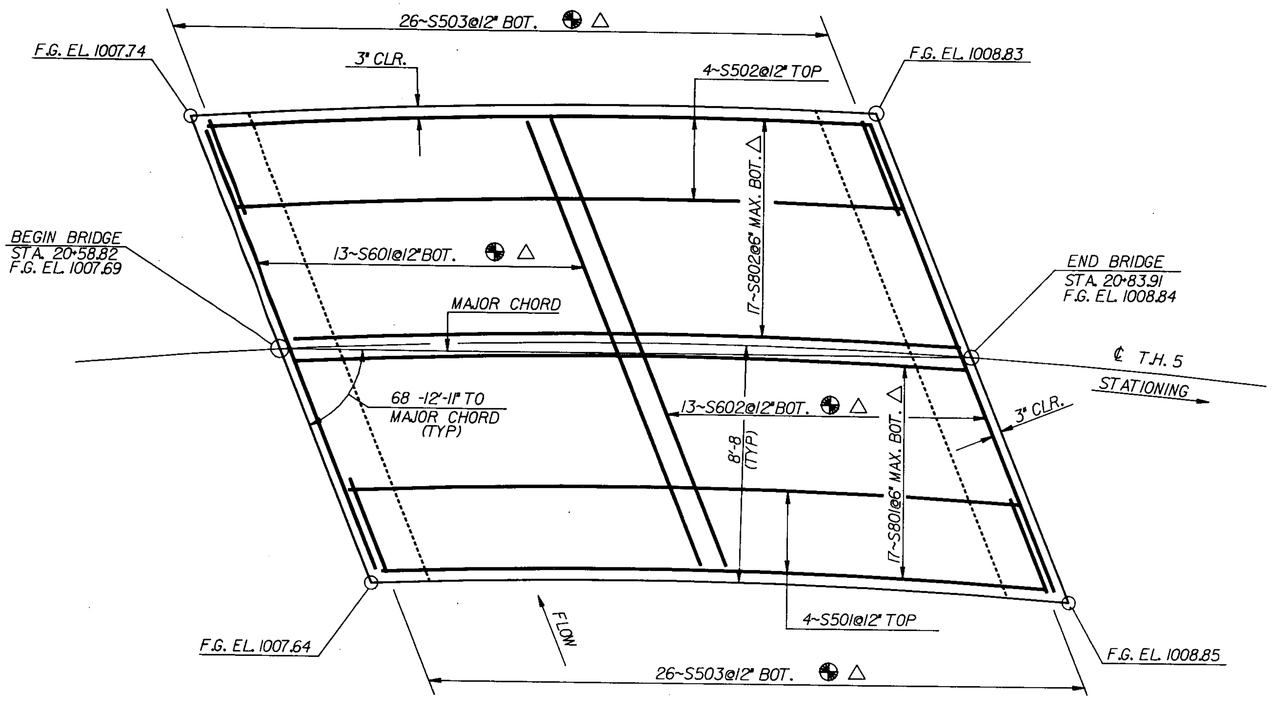
* 2'-0 DIMENSION IS SET @ CHANNEL STATION 30+00. MATCH INTO EXISTING CHANNEL ELEVATION AT STONE FILL LIMITS.



ELEVATION @ NORTH FASCIA
Scale 1"=10'-0

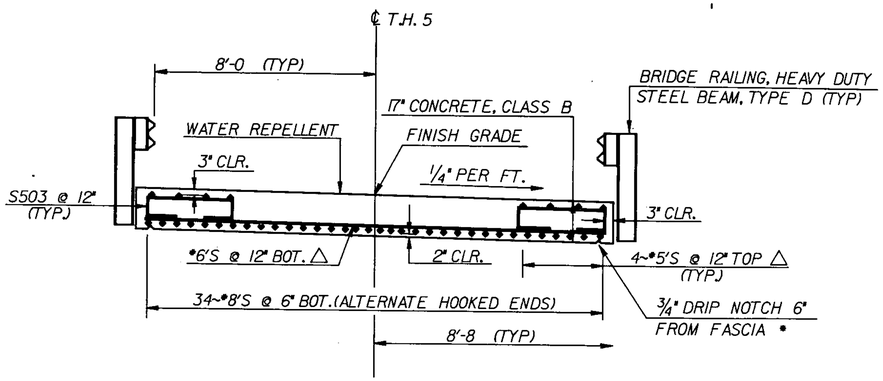
STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of MAIDSTONE	Bridge No. 6
Highway No. T. H. 5	Log Sta. / Surv. Sta.
PLAN AND ELEVATION	
T.H. 5 OVER DUTTON BROOK	
Designed By G. SPILAK	Drawn By D. WILLEY
Checked By J. POTTER Date 3-84	Bridge Design Supervisor R. S. HAUPT Date 3-84
PROJECT MAIDSTONE	PROJECT NO. BRZ 1447 (4)
I.G.C. Info. QSAI:I30,25I63C225PE.DGN	
Bridge Sheet No.	Sheet 8 of 31



PLAN

SCALE 3/8" = 1'-0



TYPICAL SECTION

SCALE 3/8" = 1'-0

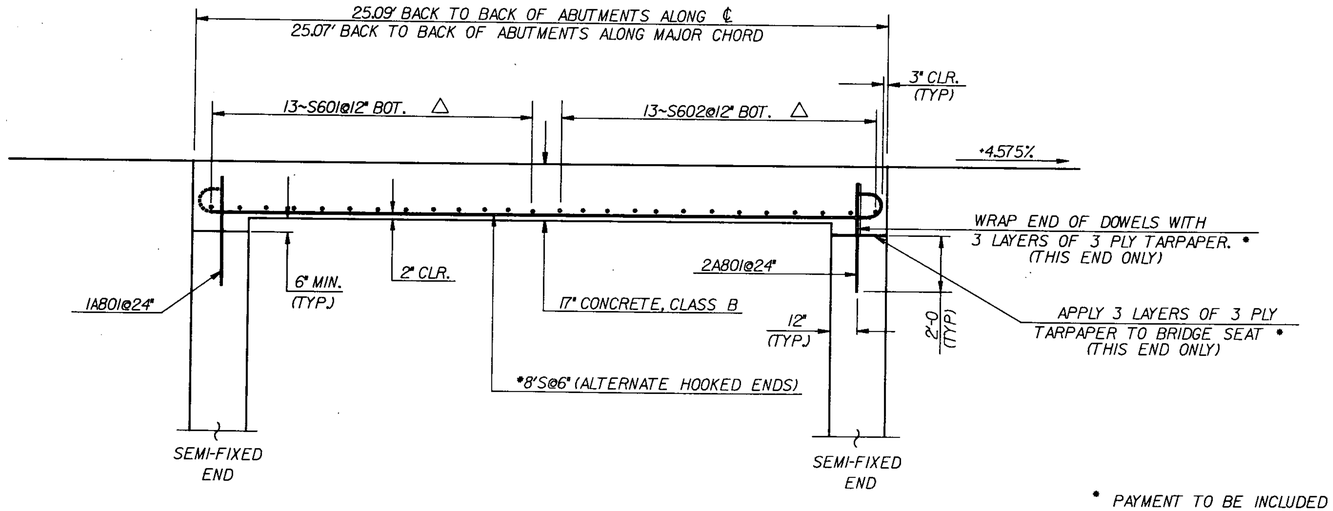
• STOP DRIP NOTCHES 3' FROM FACE OF ABUTMENTS.

△ - INDICATES CUT TO FIT IN FIELD.

⊕ - DISTANCE MEASURED ALONG MAJOR CHORD.

NOTES

1. ALL LONGITUDINAL REINFORCING STEEL SHALL BE PLACED AS NEAR AS PRACTICAL TO MATCH THE CURVE.
2. THE CONCRETE DECK SHALL BE BROOM FINISHED.



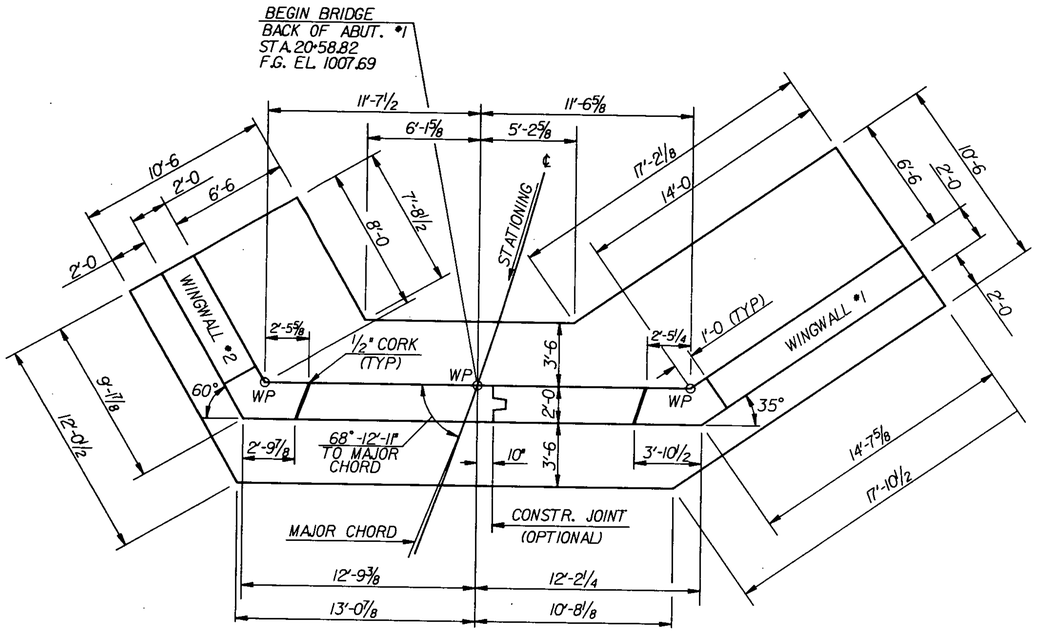
ELEVATION @ C/L

SCALE 3/8" = 1'-0

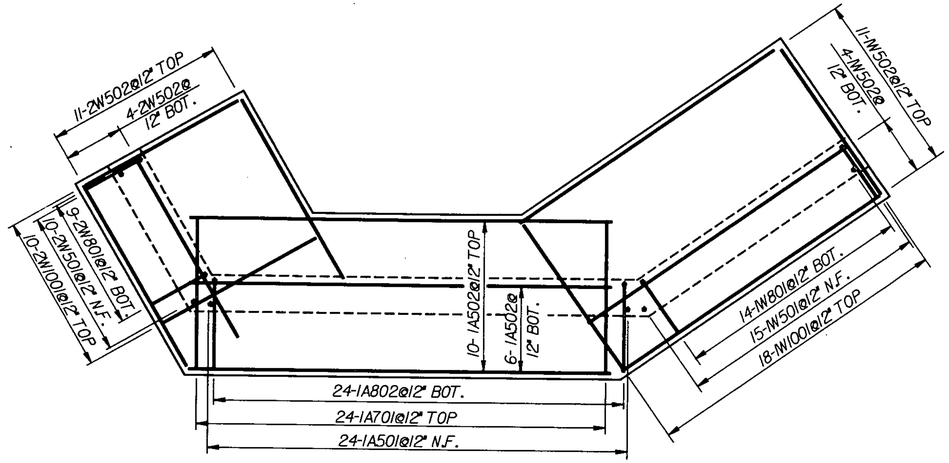
• PAYMENT TO BE INCLUDED IN THE UNIT PRICE FOR CONCRETE, CLASS B.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

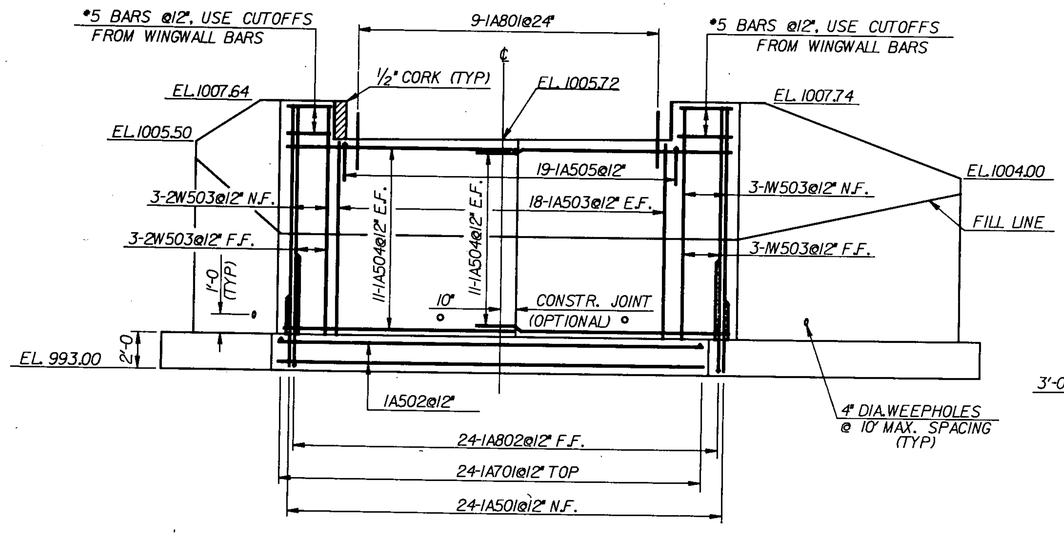
Town Of MAIDSTONE	Bridge No. 6
Highway No. T.H. 5	Log Sta. / Surv. Sta.
T.H. 5 OVER DUTTON BROOK	
SLAB DETAILS	
Designed By D. C. WILLEY	Drawn By D. C. WILLEY
Checked By A. ELWOOD Date 12-84	Bridge Design Supervisor R. S. HAUPT Date 1-85
PROJECT MAIDSTONE	PROJECT NO. BRZ 1447 (4)
LG.C. Info. QSA:I:30,25J63C225SLB.DGN	
Bridge Sheet No.	Sheet 9 of 31



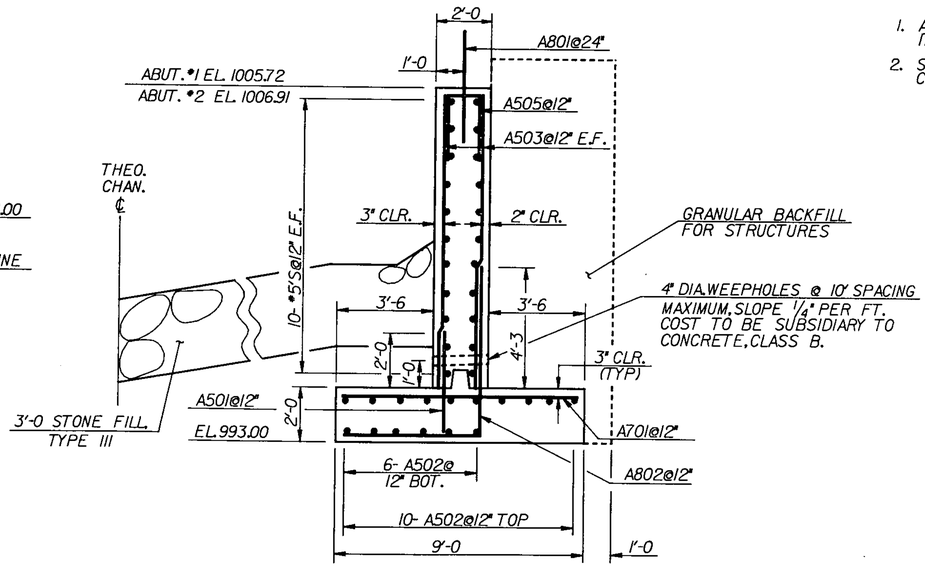
PLAN
SCALE 1/4" = 1'-0



FOOTING REINFORCING PLAN
SCALE 1/4" = 1'-0



ELEVATION
SCALE 1/4" = 1'-0



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

NOTES

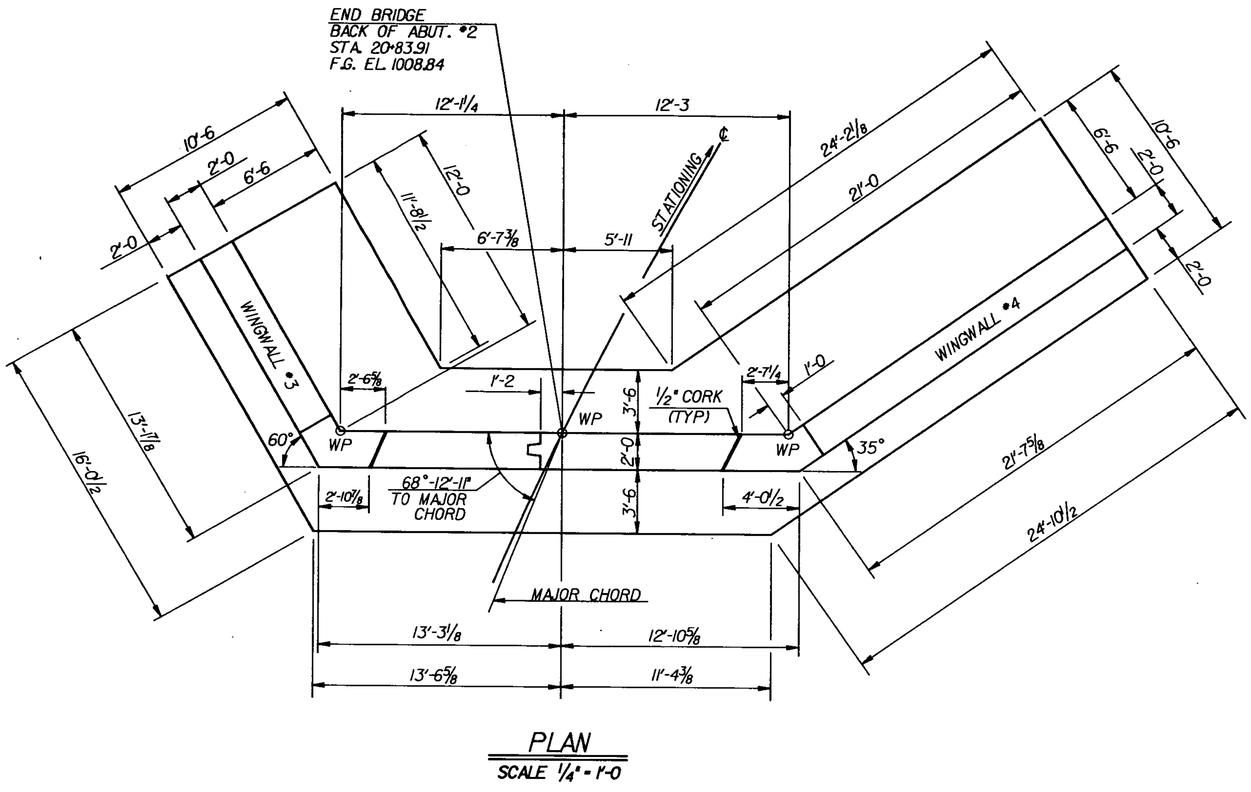
1. ALL CORK SHALL BE SUBSIDIARY TO THE ITEM CONCRETE, CLASS B.
2. SEE STANDARD SCB-D6-73 FOR DETAILS OF CONSTRUCTION JOINTS.

N.F. - NEAR FACE
F.F. - FAR FACE
E.F. - EACH FACE

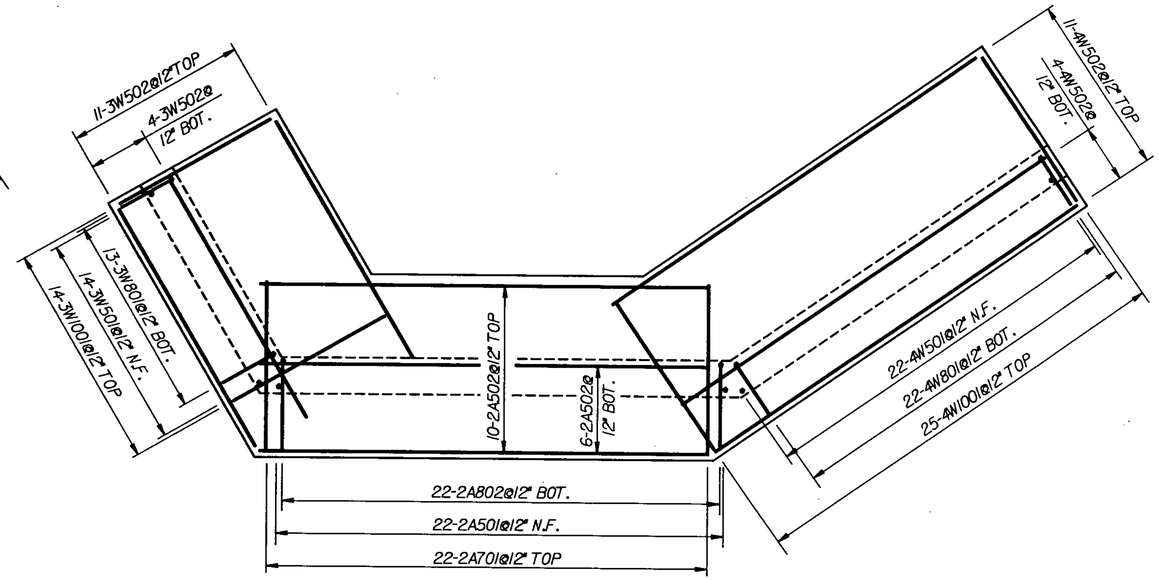
STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of MAIDSTONE	Bridge No. 6
Highway No. T.H. 5	Log Sta. / Surv. Sta. 20+70
ABUTMENT NO. 1 DETAILS	
T. H. 5 OVER DUTTON BROOK	
Designed By D. C. WILLEY	Drawn By D. C. WILLEY
Checked By A. ELWOOD Date 1-85	Bridge Design Supervisor R. S. HAUPT Date 6-84
PROJECT MAIDSTONE	PROJECT NO. BRZ 1447 (4)
L.G.C. Info. QSA#:130,25)63C225AB2.DGN	
Bridge Sheet No.	Sheet 10 of 31

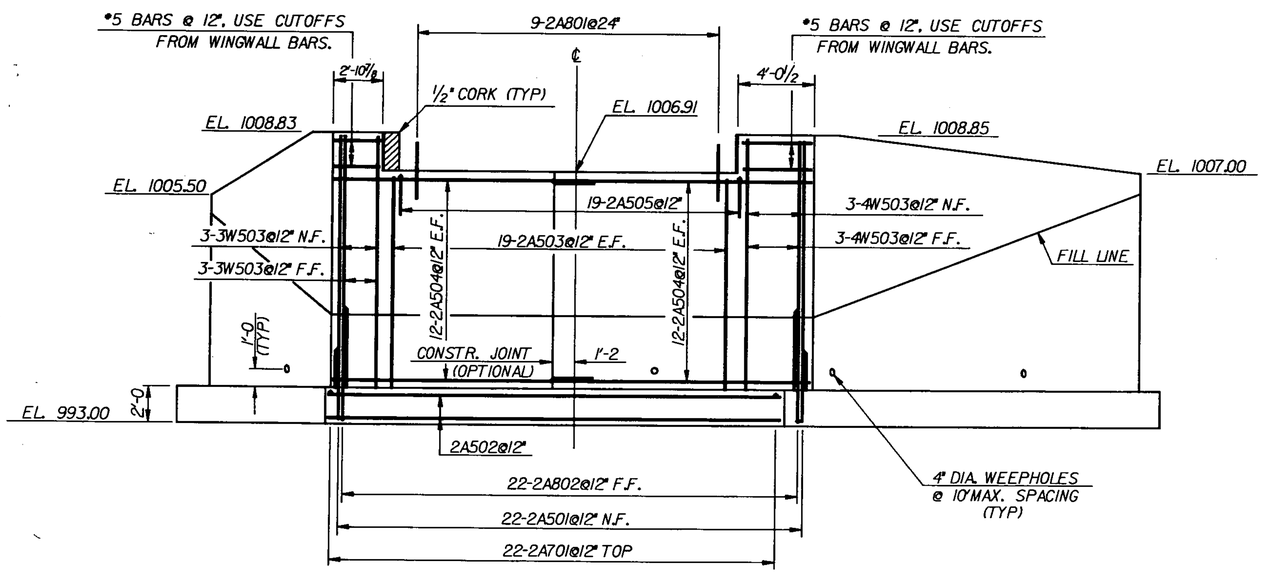
BR-6



PLAN
SCALE 1/4" = 1'-0



FOOTING REINFORCING PLAN
SCALE 1/4" = 1'-0

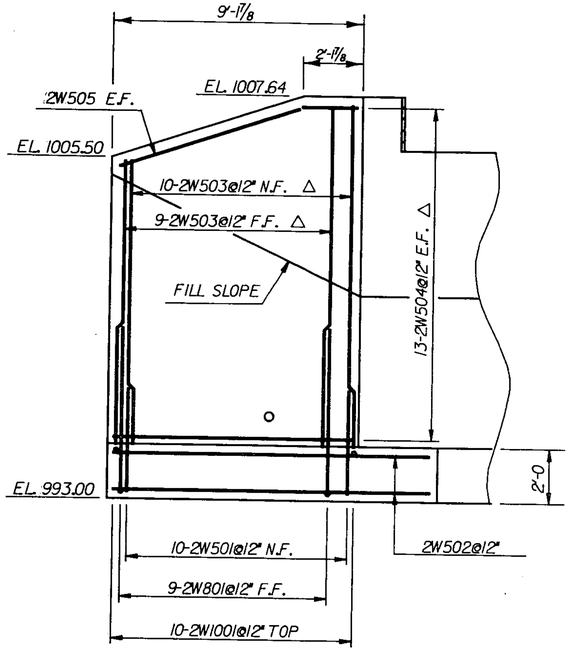


ELEVATION
SCALE 1/4" = 1'-0

STATE OF VERMONT
AGENCY OF TRANSPORTATION

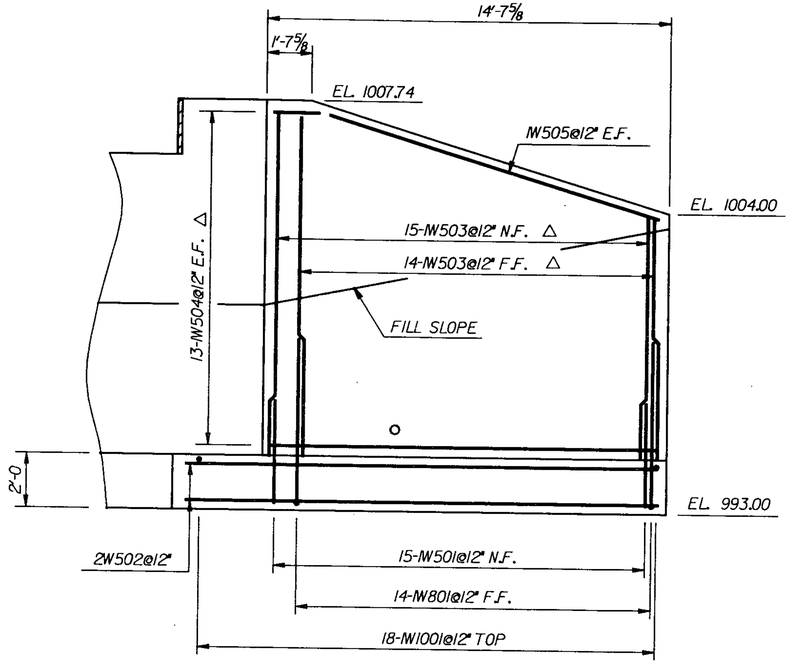
Town Of MAIDSTONE	Bridge No. 6
Highway No. T.H. 5	Log Sta. / Surv. Sta. 20+70
ABUTMENT NO. 2 DETAILS	
T. H. 5 OVER DUTTON BROOK	
Designed By D.C. WILLEY	Drawn By D.C. WILLEY
Checked By A. ELWOOD Date 1-85	Bridge Design Supervisor R.S. HAUPT Date 6-84
PROJECT MAIDSTONE	PROJECT NO. BRZ 1447 (4)
L.G.C. Info. QSA#:30.25163C225AB2.DGN	
Bridge Sheet No.	Sheet 11 of 31

BR-6



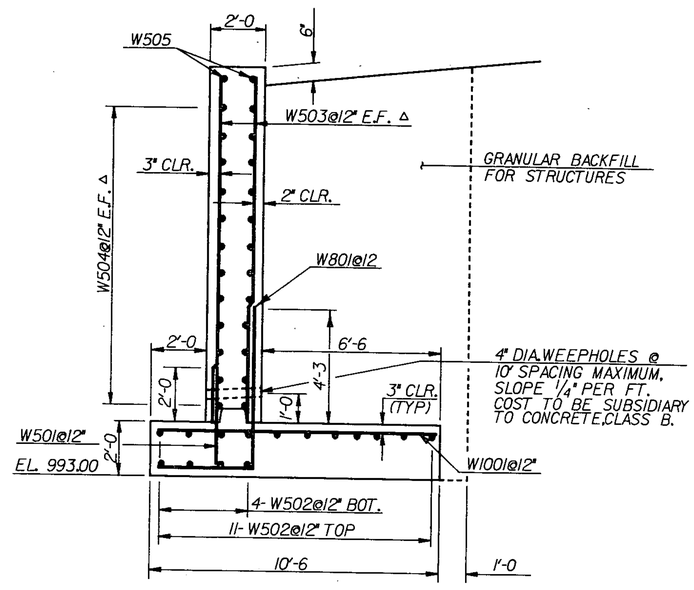
WINGWALL #2 ELEVATION

SCALE 3/8"=1'-0



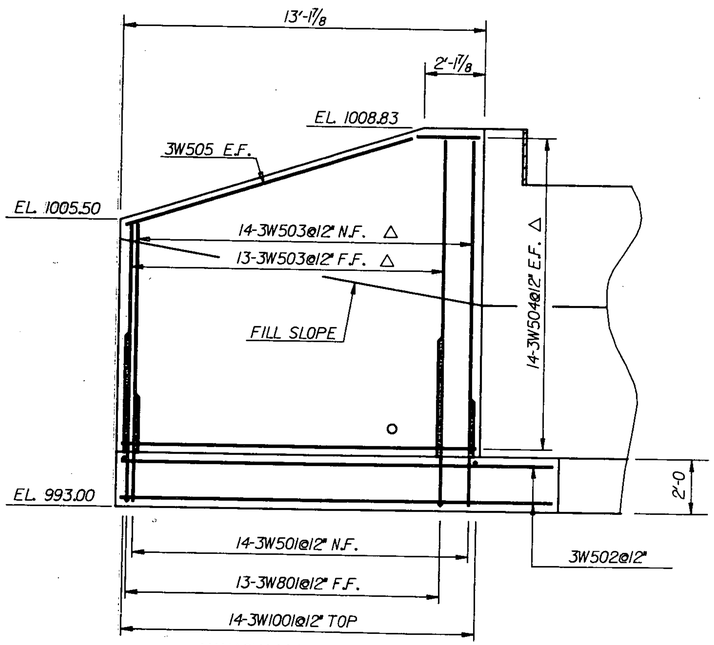
WINGWALL #1 ELEVATION

SCALE 3/8"=1'-0



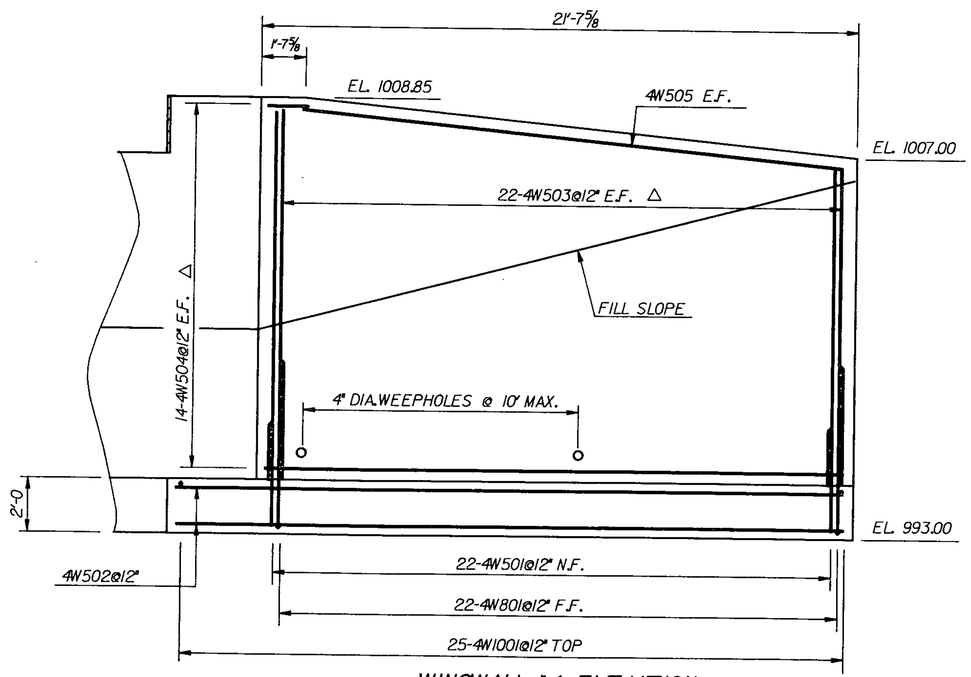
WINGWALL TYPICAL SECTION

SCALE 3/8"=1'-0



WINGWALL #3 ELEVATION

SCALE 3/8"=1'-0



WINGWALL #4 ELEVATION

SCALE 3/8"=1'-0

△ - INDICATES CUT TO FIT IN FIELD.
N.F. - NEAR FACE
F.F. - FAR FACE
E.F. - EACH FACE

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of MAIDSTONE	Bridge No. 6
Highway No. T.H. 5	Log Sta. / Surv. Sta. 20+70
WINGWALL DETAILS	
T. H. 5 OVER DUTTON BROOK	
Designed By D. C. WILLEY	Drawn By D. C. WILLEY
Checked By A. ELWOOD Date 1-85	Bridge Design Supervisor R. S. HAUPT Date 6-84
PROJECT MAIDSTONE	PROJECT NO. BRZ 1447(4)
LG.C. Info. QSA:L'30,25J63C225AB2.DGN	
Bridge Sheet No.	Sheet 12 of 31

BR-6

SUPERSTRUCTURE

ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
4	4	5	24-5	S501	STR.												
5	4	5	24-9	S502	STR.												
7	*14	6	18-2	S601	STR.												
8	13	6	18-8	S602	STR.												
11	52	5	6-6	S503	S6	0-7	0-11	3-6	0-11			0-7					
13	17	8	25-8	S801	1	0-11	24-9										
14	17	8	25-5	S802	1	0-11	24-6										

ABUTMENT NO. 1

ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
20	24	5	3-9	1A501	STR.												
21	16	↓	24-0	1A502	↓												
22	36	↓	10-5	1A503	↓												
23	44	5	13-3	1A504	STR.												
25	*25	7	8-6	1A701	STR.												
27	9	8	3-6	1A801	STR.												
30	19	5	5-7	1A505	17		2-0	1-7	2-0								
32	24	8	11-0	1A802	17		6-0	5-0									

WINGWALL NO. 1

ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
35	15	5	3-9	1W501	STR.												
39	15	↓	17-0	1W502	↓												
40	35	↓	12-5	1W503	↓												
41	26	↓	14-1	1W504	↓												
42	2	5	13-1	1W505	STR.												
44	18	10	10-0	1W1001	STR.												
47	*15	8	9-6	1W801	17		6-0	3-6									

WINGWALL NO. 2

ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
50	10	5	3-9	2W501	STR.												
54	15	↓	11-6	2W502	↓												
55	25	↓	12-5	2W503	↓												
56	*27	↓	8-7	2W504	↓												
57	2	5	7-0	2W505	STR.												
59	*11	10	10-0	2W1001	STR.												
62	9	8	9-6	2W801	17		6-0	3-6									

ABUTMENT NO. 2

ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
84	22	5	3-9	2A501	STR.												
85	16	↓	24-5	2A502	↓												
86	*39	↓	11-7	2A503	↓												
87	48	5	14-1	2A504	STR.												
89	*23	7	8-6	2A701	STR.												
91	9	8	3-6	2A801	STR.												
94	19	5	5-7	2A505	17		2-0	1-7	2-0								
96	22	8	11-0	2A802	17		6-0	5-0									

WINGWALL NO. 3

ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
102	14	5	3-9	3W501	STR.												
103	15	↓	15-6	3W502	↓												
104	33	↓	13-7	3W503	↓												
105	28	↓	12-7	3W504	↓												
106	2	5	11-11	3W505	STR.												
108	14	10	10-0	3W1001	STR.												
111	*14	8	9-6	3W801	17		6-0	3-6									

WINGWALL NO. 4

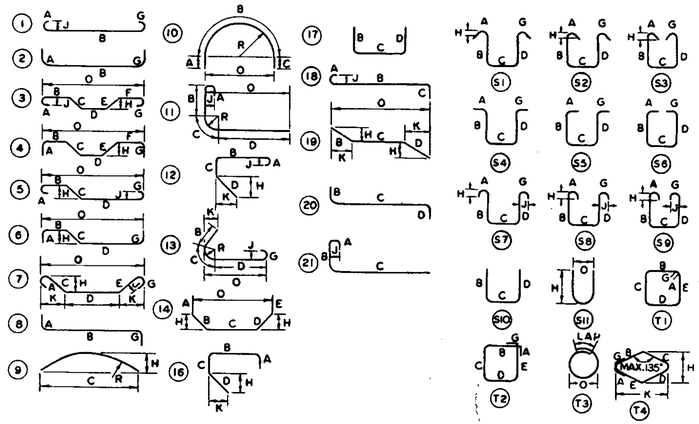
ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
117	22	5	3-9	4W501	STR.												
118	15	↓	24-2	4W502	↓												
119	50	↓	13-7	4W503	↓												
120	28	↓	19-6	4W504	↓												
121	2	5	19-6	4W505	STR.												
123	*26	10	10-0	4W1001	STR.												
125	22	8	9-6	4W801	17		6-0	3-6									

ITEM	NO. PIECES	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
161																	
162																	
163																	
164																	
165																	
166																	
167																	
168																	
169																	
170																	
171																	
172																	
173																	
174																	
175																	
176																	
177																	
178																	
179																	
180																	

ASTM STANDARD REINFORCING BARS

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

TYPICAL BAR BENDS



NOTES

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING NO. 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT," AASHTO M 31 (ASTM A 615-64) GRADE 60.
2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS AND OTHER STANDARD PRACTICE SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE."
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180° AND 135° HOOKS.
5. "J" DIMENSION ON 180° HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45° DIMENSIONS "H" AND "K" MUST BE SHOWN.

* DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.

REV. NO.	MADE BY	DATE	DESCRIPTION

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TOWN OF MAIDSTONE	BRIDGE NO. 5
HIGHWAY NO. T.H. 5	LOG STA.
	SURV. STA.
T.H. 5 OVER DUTTON BROOK	
REINFORCING STEEL SCHEDULE	
DESIGNED BY D. WILLEY	DRAWN BY D. WILLEY
CHECKED BY M.J. POLLASTRO DATE 1/85	BRIDGE DESIGN SUPERVISOR R.S. HAUPT DATE 1-85
PROJECT MAIDSTONE	PROJECT NO. BRZ 1447 (4)
BRIDGE SHEET NO.	SHEET 13 OF 31