

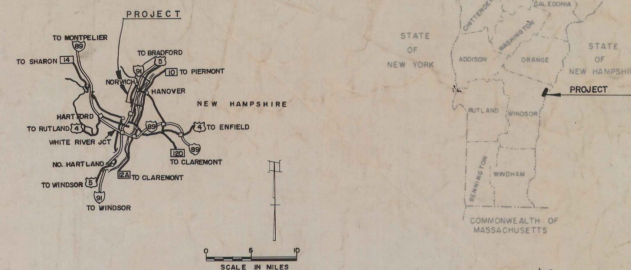
SHEET NO. 1. Composite Title Sheet
 2. Composite Quantity Sheet
 (The following sheets are from
 3-10-25) Stage I Constr.)
 3. Alignment Data Sheet
 4. Typical Sections-Mainline
 5. Quantity Sheets
 6. Item Detail & Drainage Sheets
 7-10-25 Item Detail & Drainage Sheets
 9-14- Plan and Profile Sheets
 Blank
 Blank
 (The following sheets are from
 5-10-25) Stage I Constr.)
 17. Alignment Data Sheet
 18-19- Typical Sections-Mainline
 20-21- Item Detail & Drainage Sheets
 21-22- Quantity Sheets
 23-25- Item Detail & Drainage Sheets
 26-27- Plan & Profile Sheets
 28-29- Scale Detail Drawings
 30-38- Bridge Sheets (191 out of 710A)
 39- Blank
 40- Blank
 (The following sheets are from
 5-10-26) Stage I Constr.)
 87. Alignment Data Sheet
 88-89- Typical Sections
 90-91- Quantity Sheets
 91-93- Item Detail and Drainage Sheets
 94-95- Item Detail and Drainage Sheets
 96-97- Plan & Profile Sheets (*Shr 5226-26*)
 98-99- Bridge Sheets (191 out of 710A)
 Blank
 Blank
 327. Structural Traffic Sign Support
 38-39- Traffic Sign Design and Construction Detail
 Traffic Sign Assembly and Construction Detail
 41-42- Traffic Sign and Reflector Summary Sheets
 49-57- Traffic Sign and Reflector Location Sheet
 58-60- Same as 49-57
 61- B-5 Type Section Grading 3/10/65
 62- C-1 Curve 3/10/65
 63- C-1 Curve 3/10/65
 64- D-5 Jumps and Treated Dutters 7/19/65
 65- E-1 Concrete and ACOPM Flipping 7/19/65
 66- D-5 Dute Notings 3/10/65
 67- D-5 Dute Notings 3/10/65
 68- D-10- Dute Flats 3/10/65
 69- D-10- Dute Flats 3/10/65
 70- D-10- Dute Flats 3/10/65
 71- I-1 Interstate 7/19/65
 72- I-1 Interstate 7/19/65
 73- I-1 Interstate 7/19/65
 74- I-1 Interstate 7/19/65
 75- I-1 Interstate 7/19/65
 76- I-1 Interstate 7/19/65
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 171- I-1 Interstate 7/19/65

PROPOSED IMPROVEMENT

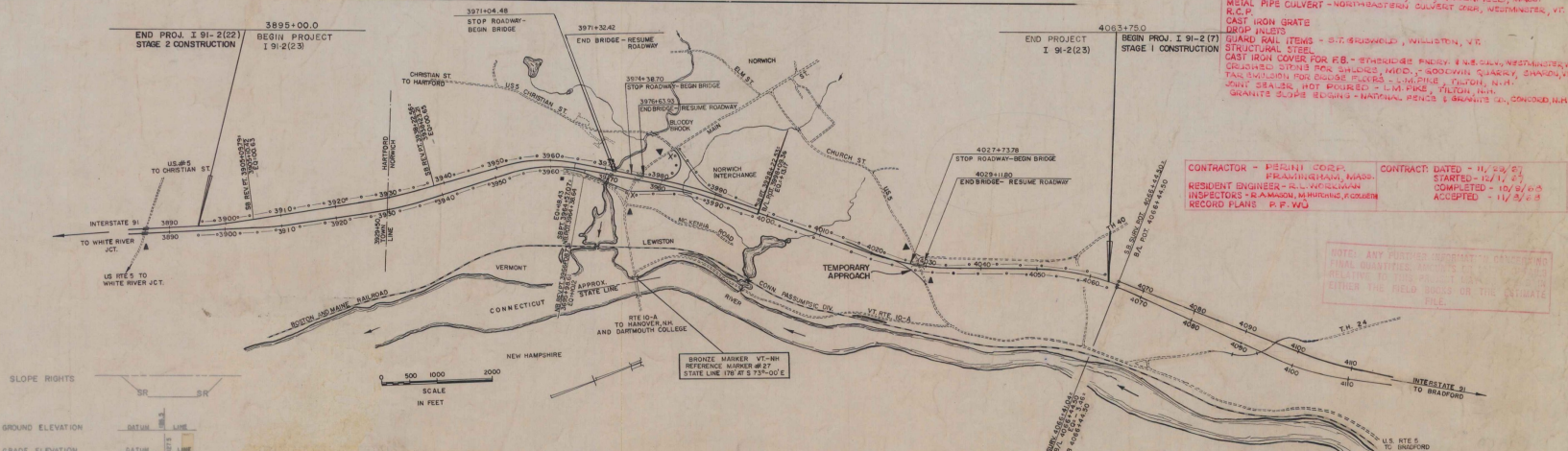
TOWNS OF HARTFORD-NORWICH
COUNTY OF WINDSOR
INTERSTATE ROUTE 91
WINDSOR-BRADFORD-ROAD

BEGINNING AT A POINT 0.653 MILE SOUTH OF THE HARTFORD-NORWICH TOWN LINE AND EXTENDING NORTHERLY 3.199 MILES
 LENGTH OF ROADWAY 16,504.03 FEET = 3.125 MILES
 LENGTH OF BRIDGES 391.19 FEET = 0.074 MILE
 LENGTH OF PROJECT 16,895.22 FEET = 3.199 MILES

	SOUTH	NORTH
ADT 1962	2600	2440
ADT 1987	7380	6650
DHV 1987	1050	940
D	51%	54%
T	6%	6%
V	60	MPH

[illegible]

CONTRACTOR - PERINI CORP. FRAMINGHAM, MASS.	CONTRACT: DATED - 11/22/87
RESIDENT ENGINEER - R.L. WORKMAN	STARTED - 12/1/87
INSPECTORS - R.A. MASON, M. HURTADO, J. COLEMAN	COMPLETED - 10/2/88
	ACCEPTED - 11/2/88



DEPARTMENT OF TRANSPORTATION
BUREAU OF PUBLIC ROADS

APPROVED	
DIVISION	ENGINEER
PROJECT I	NO. 91-2(23)
STAGE 2 CONSTRUCTION	
SHEET 1	OF 129 SHEETS

APPROVED: <i>J.S. Chase</i> DISTRICT ENGINEER	APPROVED: <i>R.J. Link</i> DISTRICT ENGINEER	APPROVED: <i>Jim Born</i> DISTRICT ENGINEER	APPROVED: <i>L.M. Lane</i> DISTRICT ENGINEER	APPROVED: <i>E.H. Stebbins</i> DISTRICT ENGINEER	APPROVED: <i>R.W. Wendt</i> DISTRICT ENGINEER
DATE: 10/10/67	DATE: 10/10/67	DATE: 10/10/67	DATE: 10/10/67	DATE: 10/10/67	DATE: 10/11/67

APPROVED <i>J. L. Bess</i> DATE <i>11/10/67</i>	APPROVED <i>R. B. Smith</i> DATE <i>9/20/67</i>	APPROVED <i>Wm. J. Brown</i> DATE <i>10/16/67</i>	APPROVED <i>L. M. Lane</i> DATE <i>10/16/67</i>	APPROVED <i>E. H. Staley</i> DATE <i>10/16/67</i>	APPROVED <i>P. H. Cress</i> DATE <i>10/16/67</i>
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QUANTITY SHEET

STATE OF VERMONT DEPARTMENT OF HIGHWAYS

PROJECT NO. _____

STAGE 1 CAPING	EROSION CONTROL	STAGE 1 CONST. 1 91-2(5)	STAGE 1 CONST. 1 91-2(10)	STAGE 1 CONST. 1 91-2(18)	QUANTITIES GRAB TOTAL	UNIT	ITEMS	ITEM NO.
		500	1,000	1,000	2,500	C.Y.	Common Excavation, Class I Est.	103-A
		500	1,000		2,500	C.Y.	Borrow, Est.	104
		500	500	1,000	2,000	C.Y.	Granular Borrow, Est.	105
		100	0	700	700	C.Y.	Trench Excavation of Earth (Up to 5' Depth)	106-A
		0	20	50	70	C.Y.	Trench Excavation of Rock Est. (Up to 5' Dep.)	107-B
		87,500	57,600	88,600	233,700	S.Y.	Fine Grading-Subgrade, Mod.	108
		100	200	300	600	M/B.	Dust Control w/Water, Est.	112
		1	1	2	4	Ton	Dust & Ice Control w/Cal.Chloride	113
				25	25	Hr.	Bulldozer Rental, Est.	120
				25	25	Hr.	Power Grader Rental, Est.	121
		0	15	30	45	Hr.	All Purpose Excavator Rental, Est.	121
		7,660	5,650	9,100	22,400	C.Y.	Sub-base of Gravel, Mod.	201
		500	0	1,000	1,000	C.Y.	Sub-base of Sand, Est.	202
		43,300	30,200	43,300	116,800	C.Y.	Sub-base of Crushed Rock	203
		9,500	6,600	9,600	25,500	Ton	Crushed Gravel or Crushed Stone Plant Mixed Base Course	214
8,000	32,600	22,600	32,600	101,600	CY/M	Overall (6-0 Miles)		221
2,000				2,000	C.Y.	Gravel Backfill for Slope Stabilization		222-A
	1,590	990	1,940	4,520	C.Y.	Stripping of Gravel Pits		223
	1,036	750	1,025	2,810	C.Y.	Crushed Stone Shoulders, Mod.		203
	7,100	9,120	7,900	18,120	Gal.	Tack Coat-Type III, Mod.		215
	0	1,131	675	1,804	Gal.	Tar Emulsion for Bridge Floors		318
	7,050	5,100	7,550	19,700	Ton	Bituminous Concrete Pavement, Mod.		346
	30	15	35	80	Hr.	Poor Rolling		365
	0	88	93	192	L.F.	Joint Sealant-Not Poured		372-A
	0	5	0	5	C.Y.	Concrete-Class B, Est.		401-B
	0	500	0	500	Lbs.	Reinforcing Steel, Est.		402
	0	5	0	5	C.Y.	Consent Rubble Masonry, Est.		411
	60	86	172	312	L.F.	18" Asp. Cto.Corr. Galv.Met.Pipe, 16 Ga.		426-B
	0	0	200	200	L.F.	18" Asp. Cto.Corr. Galv.Met.Pipe, Est. 16 Ga.		426-B
	13	5	20	38	Ea.	Cast Iron Cover for Asp.Cto.Corr.Galv.Met. Pipe Flushing Basin		526
	7	11	4	22	Ea.	Changing Elevations of C.B. or Manholes		538
	3,216	3,266	3,638	10,125	L.F.	Three Cable Guard Rail w/Lt. Steel Posts		538
	12	10	18	28	Ea.	Anchor for Three Cable Guard Rail w/Lt. Steel Posts		539-B
	0	2	2	4	Ea.	Anchor for Three Cable Guard Rail w/Lt. Steel Posts		539-B
	0	4	4	8	Ea.	Anchor for Three Cable Guard Rail w/Steel Posts (for use with Standard Steel Beam Guard Rail with Steel Posts)		544
	0	104	92	196	L.F.	Standard Steel Beam Guard Rail with Steel Posts, Mod (6'3" spacing)		545-A
	70	26	85	170	Ea.	Steel Marker Posts		547-B
	3	16	12	31	Ton	Bit Conc.Surf. for Gutters & Traf. Islands, Mod.		554
	60	86	31	177	Ton	Bit Conc. Curb, Mod.		555
	0	600	0	600	L.F.	Granite Slope Edding		556-A
	1	0	1	2	Ea.	Erection of Project Markers		560
	25	25	25	75	Ea.	Boundary Markers, Est.		567
	0	1,987.5	1,600	3,587.5	L.F.	Bridge Railing (for Bridge Approaches)		572
	1/3	1/3	1/3	1	L.S.	Field Office-Engineers		590-A
	1/3	1/3	1/3	1	L.S.	Field Office-Asphalt Plants		590-C
1,550				5	Acres	Selective Thinning and Trimming, Est.		601
5,000				1,550	Lb.	Seeding		611
37,110				5,000	S.Y.	Sodding, Est.		612
40				37,110	Lb.	Fertilizer		616
4,480				40	Ton	Gravel, Limestone		618
40				4,480	C.Y.	Topsoil		621
2,480				40	Ton	Mulch		622
				2,480	S.Y.	Soil Matting		622
				3,051	S.F.	Traffic Signs	(Excluding 20)	701
				248	Ea.	Delineators		702
				1	Ea.	Overhead Traffic Sign Support w/US 5-Sta. 103+95		703
	0	0	1	1	L.F.	6" Pert.Corr.Galv.Met.Underdrain, Mod. Est.		512-1
500			500	2,000	L.F.	Stone Fill for Slope Protection[Lt.Type]Est.		512
200			200	600	C.Y.	Precast Reinforced Conc.Curb Drop Inlets,Est.		531
1			2	1	L.F.	12" Asp.Cto.Corr.Galv.Met.Pipe,Est. 16 Ga.		526-B
100			100	400				

SUMMARY SHEET NO. _____ OF _____									
TYPE OF CONSTRUCTION									
STATIONS		PAVEMENT WIDTHS					EQUATIONS		
FROM	TO	24'	36'	42'	37.25	24'	+	-	
NORTHBOUND									
3895+00	3966-08.73	7,085.73							
									Roadway
3965+98.61	3970+86.03	487.42					10.12		
3970+86.03	3971+13.97								Roadway
3971+15.97	3974+20.17	306.20				27.94			Bridge
3974+20.17	3976+45.30		225.13						Roadway
3976+45.30	4028+00.53	5,155.23							Roadway
4028+00.53	4029+37.21				136.68				Bridge
4029+37.21	4063+72.00	3,937.79							Roadway
NR TOTALS		16,495.37		389.75					
SOUTHBOUND									
3895+00	3905+09.79	1,009.79							
								0.63	Roadway
3905+10.42	3938+22.56	3,312.14							Roadway
3938+23.21	3964+57.07	2,633.86						0.65	Roadway
3964+58.64	3971+22.92	684.28					18.43		Roadway
3971+22.92	3974+57.23	306.37				27.94			Bridge
3974+57.23	3976+42.57		225.36						Roadway
3976+42.57	3988+12.53	2,139.96							Roadway
3988+09.36	4027+47.03	2,937.67					13.17		Roadway
4027+47.03	4028+66.38				139.35				Bridge
4028+66.38	4062+75.00	3,986.62							Roadway
SB TOTALS		16,512.69		392.63					
TOTALS									
AVERAGES									
ROADWAY		33,008.08	=16,504.03						
		2							
BRIDGES		782.38	=391.19						
		2							
TOTALS									
LENGTH OF PROJECT									
STATIONS	FEET	MILES	REMARKS						
REC. PROJ.	16,504.03	3.125	ROADWAY						
	391.19	.074	BRIDGES						
TOTALS		16,895.22	3.199						
TOTAL									
H O R N I C H STAGE II CONSTRUCTION 19-2(23)									
		No. 2 of 129	Filed Sheets						

STATE OF VERMONT DEPARTMENT OF HIGHWAYS

PROJECT NO.

SUMMARY SHEET NO. _____ OF _____ 19____

QUANTITY SHEET

QUANTITY SHEET

PROJECT NO. _____

SUMMARY SHEET NO. _____ OF _____ 19____

APPROXIMATE SUMMARY OF QUANTITIES

LANDSCAPING	EROSION CONTROL	BRIDGE	ROADWAY	QUANTITIES AMOUNT	UNIT	ITEMS	ITEM NO.
			500	500	C.Y.	Common Excavation, Est., Class 1.	103-A
			500	500	C.Y.	Borrow, Est.	104
			500	500	C.Y.	Granular Borrow, Est.	105
			100	100	C.Y.	Trench Excavation of Earth (inc. 94 Est.)	105-A
			87,600	87,500	S.Y.	Final Grading, Subgrade	107
			100	100	M/Gal	Dust Control w/ Water	112
			1	1	Ton	Dust Control w/ Calcium Chloride	113
			7,650	7,650	C.Y.	Sub-base of Gravel, Mod.	201
			500	500	C.Y.	Sub-base of Sand, Est.	202
			93,300	93,300	C.Y.	Sub-base of Crushed Rock	205
			9,500	9,500	Ton	Crushed Gravel or Crushed Stone Plant Mixed Base Course	213
			32,600	32,500	CY/Mi	Overhaul (4.0 Miles)	221
			1,590	1,590	C.Y.	Stripping of Gravel Pits	225
			1,035	1,035	C.Y.	Crushed Stone Shoulders, Mod.	7
			7,100	7,100	Gal.	Tack Coat, Type III, Mod.	315
			7,050	7,050	Ton	Bituminous Concrete Pavement Mod.	361
			30	30	Kr.	Proof Rolling, Est.	365
			100	100	LF	12" Asphalt Cold Corr Gals. Mat. Pipe, Est.	424-0
			200	200	C.Y.	Stone Fill for Slope Protection, Est	512
			10	10	L.F.	4" Asphalt Cold Corr. Gals. Mat. Pipe	38
			500	500	L.F.	6" Asphalt Cold Corr. Gals. Mat. Pipe, Mod., Est.	524-B
			18	18	Ea.	Cast Iron Cover for Asphalt Cold Corr. Gals.	2
			7	7	Ea.	Met. Pipe Flushing Buoys	525
			1	1	Ea.	Shaping Elevations of Catch Basins or Manholes (incl. 1 Est.)	533
			1	1	Ea.	Process Basin Cor. Curb Drop Inlet, Est.	531
			3,216	3,216	L.F.	Three Gable Road Rail w/ 14" Steel Posts	538
			12	12	Ea.	Anchors for Three Gable Road Rail w/ 14" Steel Posts	539-A
			70	70	Ea.	Steel Marker Posts	4
			3	3	Ton	Bituminous Concrete Surface for Gutters and Traffic Islands, Mod.	1
			60	60	Ton	Bituminous Concrete Curb, Mod.	2
			1	1	Ea.	Erection of Project Markers	566
			25	25	Ea.	Boundary Markers	567
			1/2	1/2	L.S.	Field Office - Engineers	599-A
			1/2	1/2	L.S.	Field Office - Asphalt Plants	599-C
			Reg.	Reg.	S.F.	Traffic Signs	701
			Reg.	Reg.	Ea.	Delimiters	6
2				2	Across	Selective Thinning & Trimming, Est.	601
	550			500	Lac.	Seeding	90
	2,000			500	S.Y.	Sodding, Est.	612
	10,500			10,500	Lw.	Fertilizer	615
	12			12	Ton	Ground Limestone, Est.	616
	1,625			1,625	C.Y.	Topsoil, Est.	11
	12			12	Ton	Mulch, Est.	622
	100			100	S.F.	Jute Matting, Est.	623

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		SUB-BASE OF GRAVEL MOD
7,385	C.Y.	Mainline
2	C.Y.	Curb Drains
204	C.Y.	U-Turn
49	C.Y.	Rounding
7,650	C.Y.	Total
		CRUSHED STONE SHOULDERS
1,002	C.Y.	Mainline
26	C.Y.	U-Turn
7	C.Y.	Rounding
1,035	C.Y.	Total
		Tack Coat, Type III, Mod.
6,775	Gal.	Mainline
290	Gal.	U-Turn
36	Gal.	Rounding
7,100	Gal.	Total
		BITUMINOUS CONCRETE PAVEMENT
6,232	Ton	Mainline
793	Ton	Shoulders
25	Ton	Rounding
7,050	Ton	Total
		TRENCH EXCAVATION OF EARTH
6	C.Y.	Curb Drains
94	C.Y.	Est.
100	C.Y.	TOTAL

DETAILED SUMMARY OF QUANTITIES

[illegible]

TYPE OF CONSTRUCTION

HARTFORD-NORMICH 191-2 (23)

STAGE 2 CONSTRUCTION
No. _____ Freq. _____
Sheet 5 of 129 Sheets

STATE OF VERMONT DEPARTMENT OF HIGHWAYS

SUMMARY SHEET NO. _____ OF _____ 19 _____

APPROXIMATE SUMMARY OF QUANTITIES

LANDSCAPING	EROSION CONTROL	BRIDGE	ROADWAY	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.
				1,000	C.Y.	Common Excavation, Est.	103-A1
				1,000	C.Y.	Borrow, Est.	104
				500	C.Y.	Granular Borrow, Est.	105
				100	100	C.Y. Trench Excav. of Earth (Incl. 60 Est.)	106-A
				20	20	C.Y. Trench Excav. of Rock Est.	106-B
				57,600	S.Y.	Fine Grading-Subgrade	107
				200	200	M/S. Dust Control w/Water, Est.	112
				1	Ton	Dust & Ice Control w/Calc. Chloride, Est.	113
				15	Hr.	All Purpose Excavator Rental, Est.	120
				5,650	5,650	C.Y. Sub-base of Gravel, Mod.	201
				30,200	30,200	C.Y. Sub-base of Crushed Rock	204
				6,600	6,600	Ton Crushed Gravel or Crushed Stone Plant Mixed	
						Base course	212
				22,600	22,600	CY(M) Overhaul, 4-0H	221
				990	C.Y.	Striping of Gravel Pits, Est.	222
				750	750	C.Y. Crushed Stone Shoulders, Mod.	303
				4,120	4,120	Gal. Tack Coat, Type III, Mod.	315
				1,131	1,131	Gal. Tar Emulsion for Bridge Floors	318
				5,100	5,100	Ton Bit. Conc. Pavement, Mod.	361
				15	15	Hr. Front Rolling, Est.	363
				89	89	L.F. Joint Sealer	372-A
				5	5	C.Y. Concrete class 3, Est.	401-B
				500	500	Lb. Reinforcing Steel, Est.	402
				5	5	C.Y. Cement Rubble Masonry, Est.	511
				98	98	L.F. 8" Asph. Ctd. Corr. Galv. Met. Pipe .16 Ga.	
						(Incl. 30' Est.)	524-B
				5	5	Ea. Cast Iron Cover for Asph. Ctd. Corr. Galv. Met.	
						Pipe Flushing Basins (Incl. 1 Est.)	526
				11	11	Ea. Changing Elevations of Catch Basins or Manholes	532
				104	104	L.F. Standard Steel Beam Guard Rail w/16" St. Posts (6-5' Spacing)	535-A
				2,265	2,265	L.F. Three Cable Guard Rail w/16" St. Posts	538
				4	4	Ea. Anchors for Three Cable Guard Rail w/St. Posts	
						(To be used with St. Beam Guard Rail)	544
				35	35	Ea. Steel Marker Posts (Incl. 8 Est.)	547-B
				16	16	Ton Bit. Conc. Surf. for St. Bt.raf. Islands, Med	554
				86	86	Ton Bit. Conc. Curs. Mod.	555
				600	600	L.F. Granite Slope Edging	556-A
				25	25	Ea. Boundary Markers, Est.	567
				1487.5	1487.5	L.F. Brdwn. Railing for Bridge Approaches	572
				1/3	1/3	L.F. Field Office Assest. Plants	599-C
				113	113	L.F. Field Office-Engineers	599-A
				1	1	Acres Selective Thinning & Trimming, Est.	601
				400	400	Lb. Seeding	611
				11,710	11,710	Lb. Fertilizer	615
				9	9	Ton Ground Limestone	616
				1,000	1,000	S.Y. Sodding, Est.	617
				1,235	1,235	C.Y. Topsoil	621
				9	9	Ton Mulch	622
				50	50	S.Y. Joint Matting, Est.	623
				Reg	Reg	S.F. Traffic Signs	701
				Reg	Reg	Ea. Delimiters	702
				10	10	Ea. Anch. for Three Cable G.R. w/Lt. Steel Posts,	
						Type A	520-A
				2	2	Ea. Anch. for Three Cable G.R. w/Lt. St. Posts,	
						Type B	520-B
				1,000	1,000	L.F. 6" Perr. Corr. Galv. Met. Underdrain, Mod., Est.	521-A
				200	200	C.Y. Stone Fill for Slope Protection (Lit. Type) Est.	512
				3	3	Ea. Precast Reinforced Conc. Curb Drop Inlets, Est.	531
				200	200	L.F. 12" Asph. Ctd. Corr. Galv. Met. Pipe, Est., 16 Ga.	524-B

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		TRENCH EXCAVATION OF EARTH
31	C.Y.	Per Drainage Sheet
69	C.Y.	Est.
100	C.Y.	TOTAL
		FINE GRADING-SUBGRADE
4,551	S.Y.	Mainline
15,722	S.Y.	Ramps
221	S.Y.	U-Turns
105	S.Y.	Rounding
57,600	S.Y.	TOTAL
		SUB-BASE OF GRAVEL, MOD.
8,796	C.Y.	Mainline
1,772	S.Y.	Ramps
19	C.Y.	Per Drainage Sheet
96	C.Y.	U-Turns
29	C.Y.	Rounding
5,650	C.Y.	TOTAL
		SUB-BASE OF CRUSHED ROCK
20,586	C.Y.	Mainline
9,583	C.Y.	Ramps
31	C.Y.	Rounding
30,200	C.Y.	TOTAL
		CRUSHED GRAVEL OR CRUSHED STONE BASE COURSE
9,587	Ton	Mainline
1,971	Ton	Ramps
42	Ton	Rounding
6,600	Ton	TOTAL
		CRUSHED STONE SHOULDERS
885	C.Y.	Mainline
221	C.Y.	Ramps
46	C.Y.	Rounding
750	C.Y.	TOTAL
		TACK COAT, TYPE III, MOD.
3,048	Gal.	Mainline
1,074	Gal.	Ramps
5	Gal.	Rounding
4,120	Gal.	TOTAL
		BITUMINOUS CONCRETE PAVEMENT
2,908	Ton	Mainline (Roadway)
1,322	Ton	Ramps (Roadway)
277	Ton	Mainline (Shoulders)
190	Ton	Ramps (Shoulders)
16	Ton	Rounding
267	Ton	Bridge - V/I 10-A over I-91
5,000	Ton	TOTAL
		BITUMINOUS CONCRETE SURFACE FOR GUTTERS AND TRAFFIC ISLANDS
15	Ton	Gutters
1	Ton	Rounding
16	Ton	TOTAL
		3 -

DETAILED SUMMARY OF QUANTITIES

TYPE OF CONSTRUCTION

[illegible]

12" SUB-BASE OF SAND ITEM 202		
STATION	STATION	POS
4024+00	4025+00	VT
4025+00	4026+00	VT
4026+00	4027+00	VT
4027+00	4028+00	VT

STONE FILL FOR SLOPE PROTECTION (LIGHT TYPE) ITEM 542		
STATION	STATION	POS
4024+00	4025+00	VT
4025+00	4026+00	VT
4026+00	4027+00	VT
4027+00	4028+00	VT

RIP RAP (LIGHT TYPE) ITEM 543-B		
STATION	STATION	POS
4024+00	4025+00	VT
4025+00	4026+00	VT
4026+00	4027+00	VT
4027+00	4028+00	VT

THREE CABLE GUARD RAIL WITH STEEL POSTS ITEM 542		
STATION	STATION	POS
4024+00	4025+00	VT
4025+00	4026+00	VT
4026+00	4027+00	VT
4027+00	4028+00	VT

REMOVAL AND DISPOSAL OF PRESENT GUARD RAIL ITEM 543		
STATION	STATION	POS
4024+00	4025+00	VT
4025+00	4026+00	VT
4026+00	4027+00	VT
4027+00	4028+00	VT

BITUMINOUS CONCRETE CURB ITEM 545		
STATION	STATION	POS
4024+00	4025+00	VT
4025+00	4026+00	VT
4026+00	4027+00	VT
4027+00	4028+00	VT

STANDARD STEEL BEAM GUARD RAIL WITH STEEL POSTS ITEM 545-A		
STATION	STATION	POS
4024+00	4025+00	VT
4025+00	4026+00	VT
4026+00	4027+00	VT
4027+00	4028+00	VT



JUTE MATTING ITEM 523		
STATION	STATION	POS
4024+00	4025+00	VT
4025+00	4026+00	VT
4026+00	4027+00	VT
4027+00	4028+00	VT

PROPERTY LINE FENCE WITH STEEL POSTS ITEM 543-B MOD		
STATION	STATION	POS
4024+00	4025+00	VT
4025+00	4026+00	VT
4026+00	4027+00	VT
4027+00	4028+00	VT

SELECTIVE THINNING AND TRIMMING ITEM 601		
STATION	STATION	POS
4024+00	4025+00	VT
4025+00	4026+00	VT
4026+00	4027+00	VT
4027+00	4028+00	VT

DRILLING AND BLASTING OF SOLID ROCK SUBGRADE ITEM 110		
STATION	STATION	POS
4024+00	4025+00	VT
4025+00	4026+00	VT
4026+00	4027+00	VT
4027+00	4028+00	VT

CONSTRUCT DRIVE		
STATION	STATION	POS
4024+00	4025+00	VT
4025+00	4026+00	VT
4026+00	4027+00	VT
4027+00	4028+00	VT

CONSTRUCT APPROACH		
STATION	STATION	POS
4024+00	4025+00	VT
4025+00	4026+00	VT
4026+00	4027+00	VT
4027+00	4028+00	VT

STAGE 3 CONSTRUCTION		
STATION	STATION	POS
4024+00	4025+00	VT
4025+00	4026+00	VT
4026+00	4027+00	VT
4027+00	4028+00	VT

STAGE 1 CONSTRUCTION		
STATION	STATION	POS
4024+00	4025+00	VT
4025+00	4026+00	VT
4026+00	4027+00	VT
4027+00	4028+00	VT

Rev Temp Appr Sheets
Change Order #

July Meeting
3903+00 - 3904+00 Med
3906+70 - 3906+00 Med
3907+00 - 3907+25 Med

* Three Cable Guard Rail w/ Light
Steel Posts, 12' on 22'

Terminal of Project Quantities
SB 19CV Excavation 21CV Full
NB 19CV Excavation 22CV All

Property Line Fence

Chain Link Fence 6' High

Construct Maintenance U-Turn
NB 3995+85 LT

Ramp C 5+00 Rt - NB 3995+00 Rt
Ramp D 5+00 - 6+00 Rt

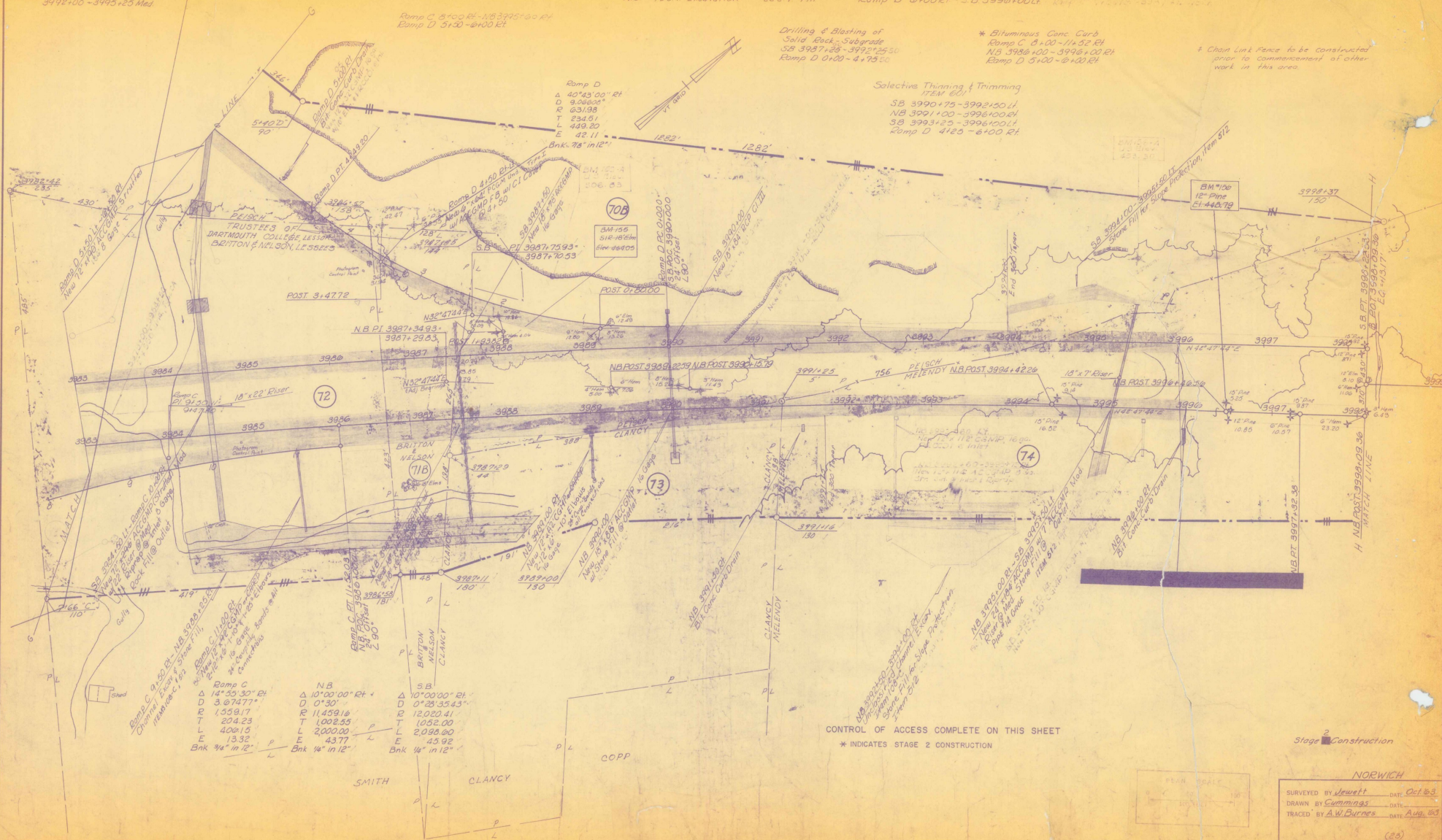
Drilling & Blasting of
Solid Rock Subgrade
SB 3987+28 - 3995+25
Ramp D 0+00 - 4+75

* Bituminous Conc Curb
Ramp C 8+00 - 11+52 Rt
NB 3986+00 - 3996+00 Rt
Ramp D 5+00 - 6+00 Rt

* Chain Link Fence to be constructed
prior to commencement of other
work in this area

Selective Thinning & Trimming

SB 3990+75 - 3992+50 Lt
NB 3991+00 - 3996+00 Rt
SB 3993+25 - 3996+00 Lt
Ramp D 4+25 - 6+00 Rt



CONTROL OF ACCESS COMPLETE ON THIS SHEET
* INDICATES STAGE 2 CONSTRUCTION

Stage 2 Construction

NORWICH
SURVEYED BY Jewett DATE Oct 88
DRAWN BY Cummings DATE
TRACED BY A.W. Barnes DATE Aug 89
PROJ NO 91-2 (20)
SHEET 34 OF 179

PROJECT NO. I 91-2 ()

STAGE 2 CONSTRUCTION

[illegible]

STATE OF VERMONT
DEPARTMENT OF
HIGHWAYS

TYPE CHD
& CORRECTED
9/15/67

STATE OF VERMONT
DEPARTMENT OF
HIGHWAYS

STATE OF VERMONT
DEPARTMENT OF
HIGHWAYS

TYPE CHK
& CORRECTED
9/15/67

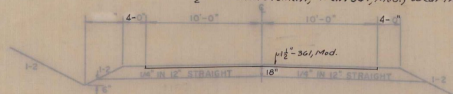
DATE	
BY	
CHECKED	
APPROVED	

DATE	
BY	
CHECKED	
APPROVED	

U.S. 5 DETOUR TYPICAL

18" SUB-BASE OF GRAVEL, ITEM 201, MOD.

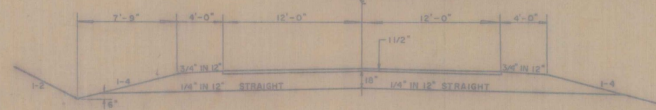
1 1/2" Bit. Gm. Pavement, Item 361, Mod. Wearing Course, Type III



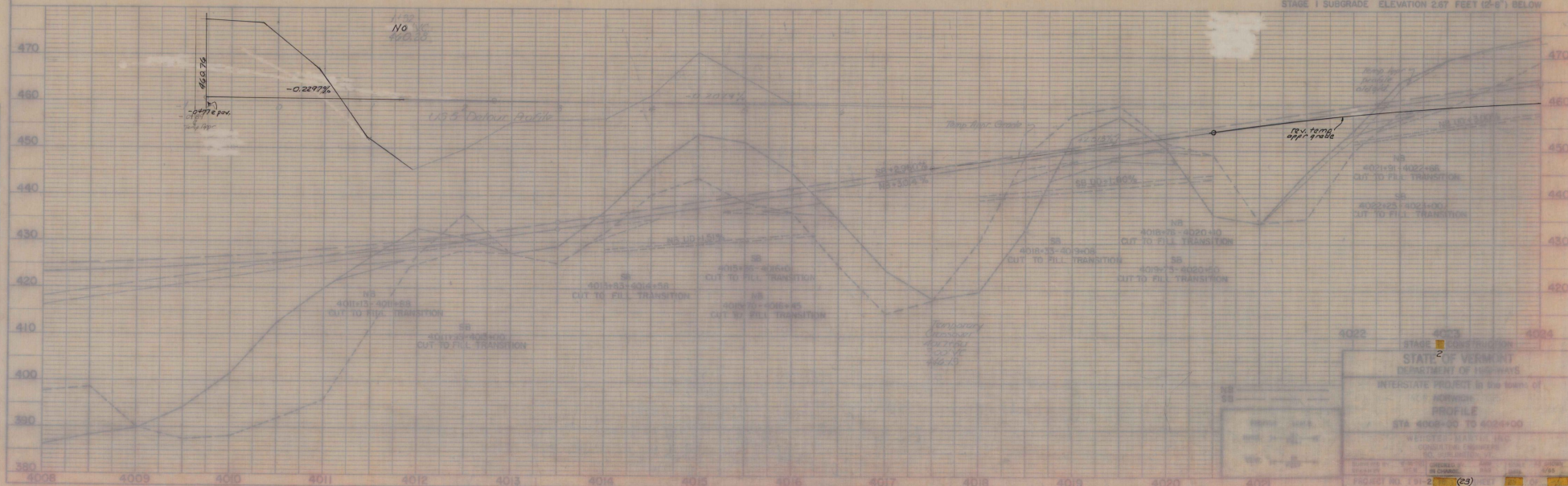
TEMPORARY APPROACH TYPICAL

1 1/2" BITUMINOUS CONCRETE PAVEMENT, ITEM 361, MOD. WEARING COURSE, TYPE III

18" SUB-BASE OF GRAVEL, ITEM 201, MOD.



STAGE 2 FINISHED GRADES SHOWN
STAGE 1 SUBGRADE ELEVATION 2.67 FEET (81-6") BELOW



DATE	
BY	
CHECKED	
APPROVED	

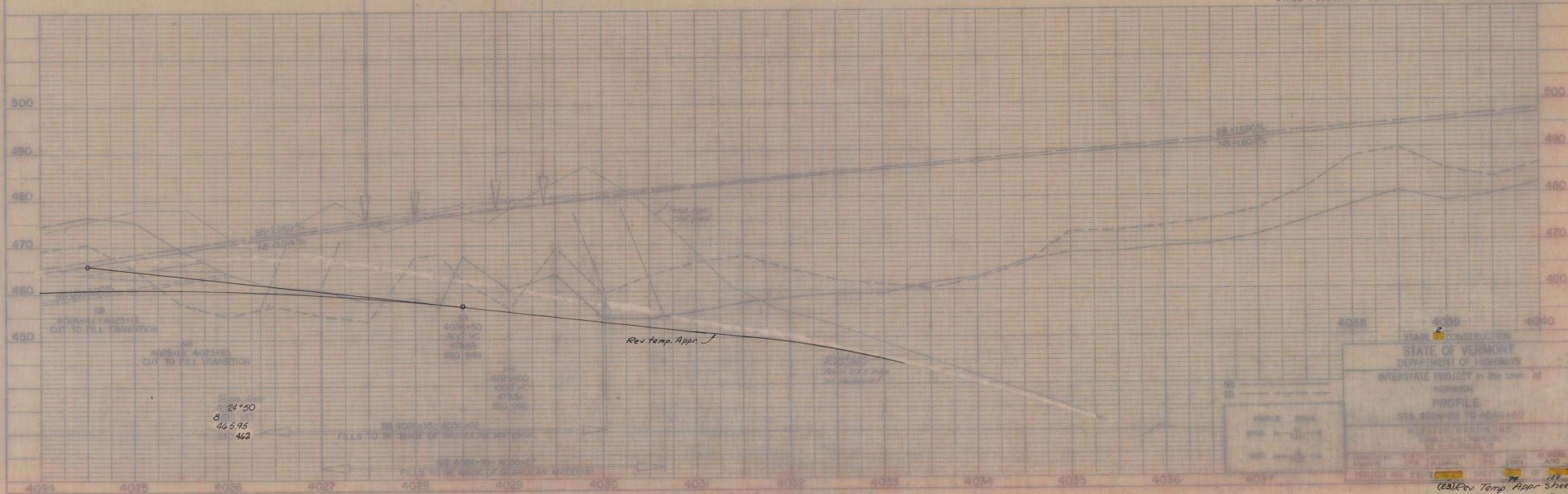
STATE OF VERMONT
DEPARTMENT OF HIGHWAYS
INTERSTATE PROJECT in the Town of
MORRIS
PROFILE
STA 4008+00 TO 4020+00
REVISION NO. 1
FIGURE NO. 111-2 (23)
Rev. Temp. Appr. Sheets
Change Order 72 129

PLAN
 SCALE 1" = 40'
 DATE 10/1/50
 DRAWN BY J. H. HARRIS
 CHECKED BY J. H. HARRIS
 APPROVED BY J. H. HARRIS

PROFILE
 SCALE 1" = 10'
 DATE 10/1/50
 DRAWN BY J. H. HARRIS
 CHECKED BY J. H. HARRIS
 APPROVED BY J. H. HARRIS

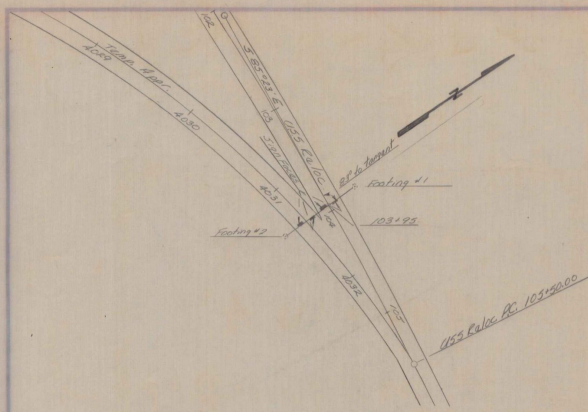
SB 4027+47.03
 NB 4028+00.53
 STOP ROADWAY BEGIN BRIDGE
 SB 4028+86.38
 NB 4029+37.21
 END BRIDGE RESUME ROADWAY

STAGE 2 FINISHED GRADES SHOWN
 STAGE 1 SUBGRADE ELEVATION 2.67 FEET (2'-6") BELOW

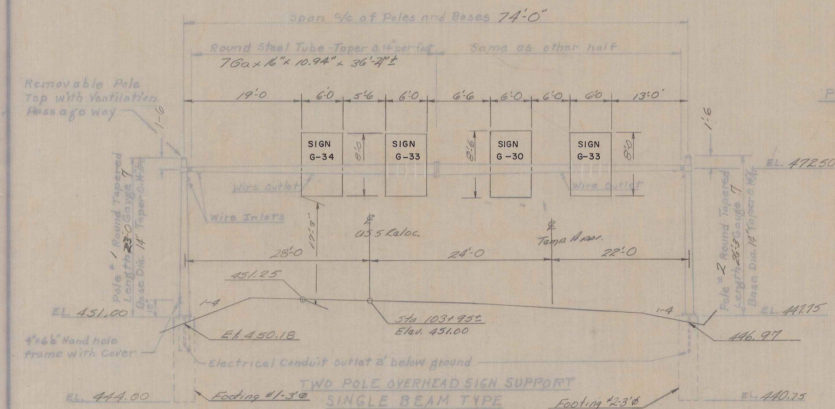


STAGE 2 CONSTRUCTION	
STATE OF VERMONT	
DEPARTMENT OF HIGHWAYS	
INTERSTATE PROJECT in the town of	
NORMAN	
PROFILE	
STA 4024+00 TO 4040+00	
SHEET 1 OF 1	
DATE	10/1/50
DRAWN BY	J. H. HARRIS
CHECKED BY	J. H. HARRIS
APPROVED BY	J. H. HARRIS

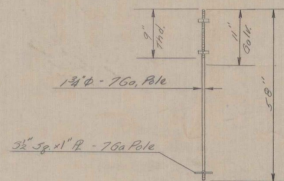
(23) Rev Temp. Appr. Sheets
 Charge Order



LOCATION PLAN
Scale 1"=50'

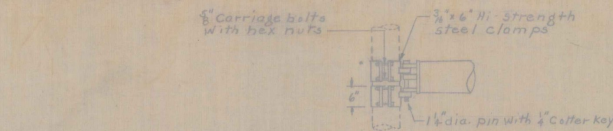


ELEVATION VIEW
Not to Scale

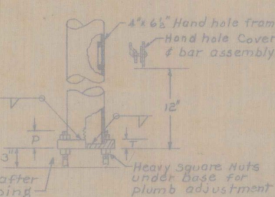


ANCHOR BOLT

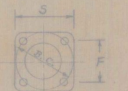
No.	Pole Description	S.C.	F	S	T	P	Anchor Bolt Size
1	7H 14' x 10.18' x 29'-0"	20	14'	20'	2'	3 3/4"	1 1/2" x 58"
2	7H 14' x 10.32' x 26'-9"	20	14'	20'	2'	3 3/4"	1 1/2" x 58"



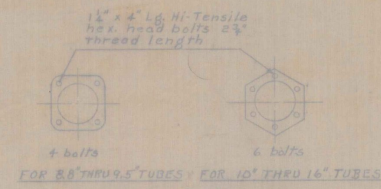
BEAM AND POLE CONNECTION



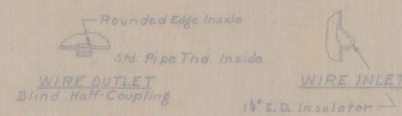
CENTER JOINT DETAIL



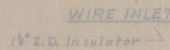
POLE BASE DETAIL



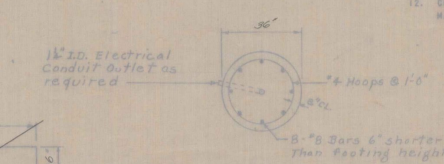
CENTER JOINT PLATES



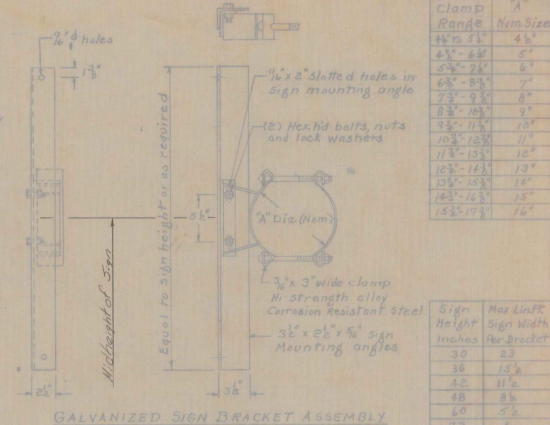
WIRE OUTLET
Blind Half-Coupling



WIRE INLET
1 1/2" I.D. Insulator



CROSS-SECTION CONCRETE FOOTING



GALVANIZED SIGN BRACKET ASSEMBLY

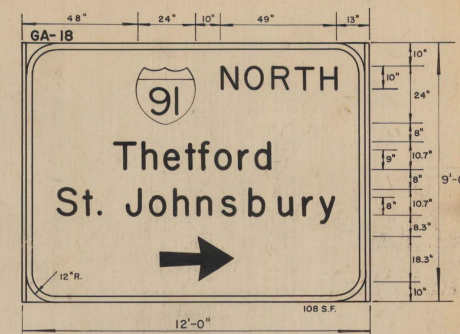
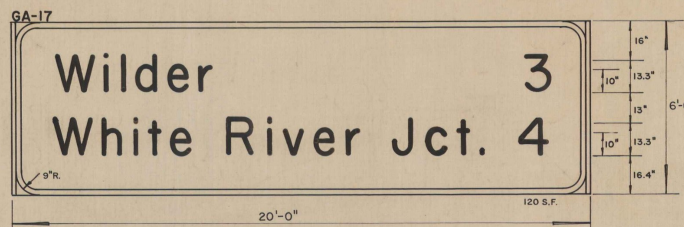
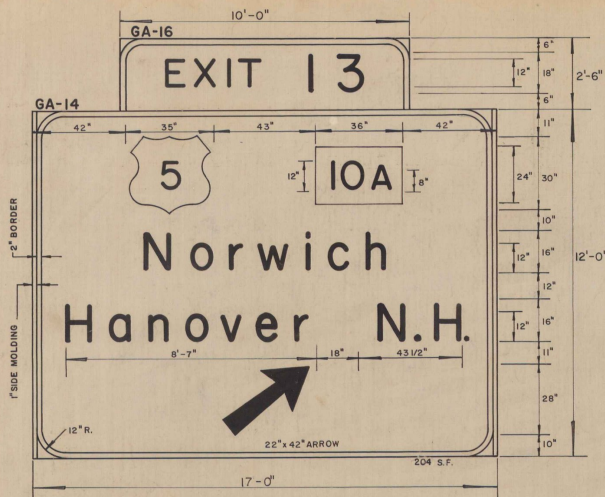
GENERAL NOTES

- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT, DEPARTMENT OF HIGHWAYS, STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, DATED APRIL 1964, WITH CURRENT MODIFICATIONS.
- OVERHEAD SIGN SUPPORTS ARE TO BE DESIGNED TO SATISFY REQUIREMENTS OF THE FOLLOWING A.S.H.M. PUBLICATION ENTITLED "SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS", DATED NOVEMBER, 1960.
- ANCHOR BOLTS: FOUR HIGH STRENGTH STEEL ANCHOR BOLTS, HAVING A TYPICAL TENSILE YIELD STRENGTH OF 65,000 P.S.I., AND AN ULTIMATE OF 81,000 P.S.I., AND EACH FITTED WITH BOTH A SQUARE NOT AND A HEXAGON NOT, SHALL BE FURNISHED WITH EACH POLE. EACH ANCHOR BOLT SHALL HAVE AN "L" END AT THE BOTTOM AND BE THREADED AT THE TOP END. THREADED ENDS AND ALL NUTS SHALL BE GALVANIZED. THE ANCHOR BOLTS SHALL BE CAPABLE OF RESISTING AT YIELD STRENGTH STRESS THE FULL BENDING MOMENT OF THE SHAFT AT ITS YIELD STRENGTH STRESS.
- FLANGE BOLTS: ALL FLANGE BOLTS WITH HEX NUTS SHALL BE HIGH STRENGTH STEEL AND CONFORM TO ASTM SPECIFICATIONS A 193-65, GRADE 57, HAVING A MINIMUM TENSILE YIELD STRENGTH OF 105,000 P.S.I., AND A MINIMUM TENSILE ULTIMATE STRENGTH OF 125,000 P.S.I. THESE BOLTS AND ATTACHED NUTS SHALL BE HOT DIP GALVANIZED, PER ASTM A 153-65, WITH THE NUTS TAPPED .015" OVERSIZE TO INSURE PROPER FITTING. THE FLANGE BOLTS SHALL BE CAPABLE OF RESISTING AT 75% OF YIELD STRENGTH STRESS THE FULL BENDING MOMENT OF THE SHAFT AT ITS YIELD STRENGTH STRESS.
- CROSS BEAM CHORDS AND UPRIGHT POLE MEMBERS: THESE STEEL TUBES SHALL BE FORMED AND WELDED WITH ONE CONTINUOUS LONGITUDINAL WELD ONLY. AFTER FORMING AND WELDING, THEY SHALL BE COLD ROLLED TO INSURE UNIFORMITY OF SIZE, SHOOTNEEDS OF WELD, AND SHALL HAVE A MINIMUM YIELD STRENGTH OF 65,000 P.S.I. THERE SHALL BE NO TRANSVERSE WELDING EXCEPT AT THE FLANGE CORRECTIONS AND POLE BASE PLATES, WHERE THE TUBES SHALL TELESCOPE THE FLANGES AND PLATES AND BE CONTINUOUSLY WELDED BOTH INSIDE AND OUT TO WITHSTAND THE FULL TRANSFER OF TUBE BENDING STRESS TO THE BOLTS. WELDING SHALL BE PERFORMED BY THE ELECTRIC ARC PROCESS USING "E60" CLASS COATED ELECTRODES APPROVED BY THE AMERICAN WELDING SOCIETY. ALL WELDING SHALL BE CHIPPED AND BRUSHED CLEAN PERMITTING ACCURATE WELD INSPECTION. CROSS BEAM TUBES SHALL BE CAMBERED TO PREVENT SAG UNDER DEAD LOAD OF BEAMS AND SIGNS.
- ALL STEEL EXCEPT CONCRETE REINFORCING BARS TO BE HOT DIP GALVANIZED. THE ASSEMBLY SHALL BE DESIGNED AND MANUFACTURED TO PERMIT GALVANIZING BY ALL INTERIOR AND EXTERIOR SURFACES, FREE OF PROJECTIONS AND OTHER STRUCTURAL OBSTRUCTIONS THAT WILL NOT PERMIT A MINIMUM AVERAGE ZINC COATING THICKNESS OF 2.172 OUNCES PER SQUARE FOOT OF SURFACE AND THERE SHALL BE NO GALVANIZING IN ACCORDANCE WITH ASTM SPECIFICATION A 123-65.
- DESIGN STRESSES: CONCRETE f_c EQUALS 4,200 P.S.I., REINFORCING STEEL EQUALS 20,000 P.S.I., CONCRETE f_s EQUALS 3,000 P.S.I.
- WIND LOAD ON EXPOSED TUBES AND SIGNS EQUALS 250 PER SQUARE FOOT.
- MAXIMUM FOUNDATION PRESSURE EQUALS ONE AND ONE-HALF (1 1/2) TONS PER SQUARE FOOT UNLESS OTHERWISE NOTED.
- SIGN SUPPORT TUBES MAY BE FABRICATED IN THREE (3) SECTIONS AT THE CONTRACTOR'S OPTION PROVIDED ALTERNATE DESIGN CONFORMS TO ORIGINAL REQUIREMENTS.
- AN EQUIVALENT ALUMINUM ALLOY SPAN MAY BE SUBSTITUTED WITH SUBMITTAL OF DRAWINGS AND APPROVAL OF THE ENGINEER.
- CHANGES IN THE DESIGN DETAILS SHOWN HERE OF THE USE OF OTHER MATERIALS OR DESIGNERS, MEETING REQUIREMENTS STATED ABOVE, MAY BE PERMITTED WITH THE WRITTEN APPROVAL OF THE ENGINEER.

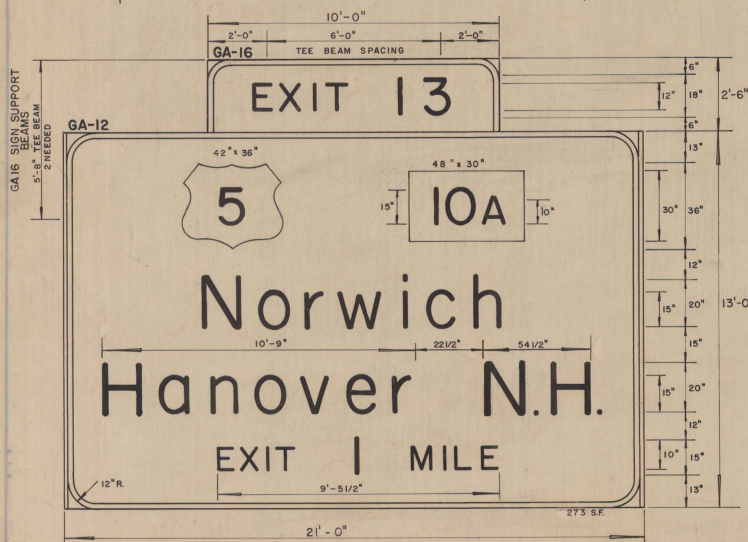
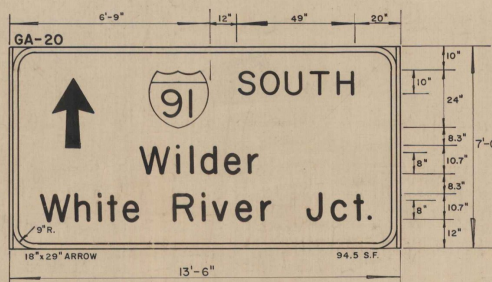
STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

PROJECT NORWICH
TOWN OF NORWICH
ROUTE No 103 Rte. STA 103+95
OVERHEAD TRAFFIC SIGN SUPPORT
AT STA. 103+95 U.S. 5 RELOCATION
SCALE AS NOTED
IN CHARGE M.A. SMITH
DRAWN BY R.A. FLETCHER CHECKED BY J.B. ROBERTSON
PROJECT NO J791-2(23)
SHEET 82 OF 129

No.	Item	Unit	Total
703	Overhead Traffic Sign Support	Each	1



GA-19 - SAME EXCEPT ARROW LEFT



Porcelain enameling panels on this project may have a 1/8" corner radius on their face. They shall be alloy 6061-T4 or a magnesium-silicon type enameling alloy similar to alloy 6061 and with mechanical properties after enameling of 16,000 p.s.i. yield and 30,000 p.s.i. tensile strength.

MATERIALS:

The sign base material used for these signs shall be extruded aluminum panels with a porcelain enamel finish. The reflective text material, except for the route markers, shall be acrylic plastic reflectors in embossed letter frames.

Plus GA-15, AND GA-31

ROUTE MARKERS

The route markers shall conform with the designs and materials detailed on standard sheets E-11, E-12 and E-13.

COLORS

The signs, except for route markers, shall have reflectorized white text on non-reflectorized green backgrounds. The green shall conform with the standard color adopted by the American Association of State Highway Officials and approved by the U.S. Department of Commerce, Bureau of Public Roads.

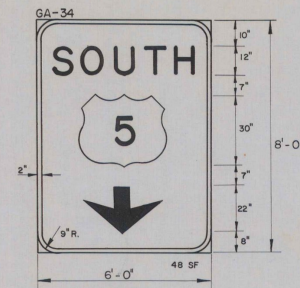
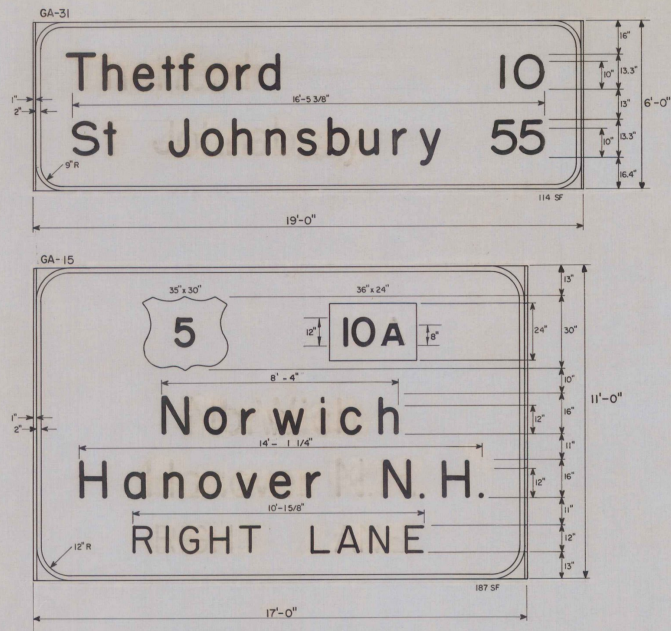
LETTERING

Letters and digits, except on route markers, shall conform with Series E of the standard alphabet for highway signs, approved by the National Joint Committee on Uniform Traffic Control Devices, with the stroke widths modified to one-fifth the height.

HARTFORD-NORWICH

TRAFFIC SIGNS
DESIGN AND
CONSTRUCTION DETAILS

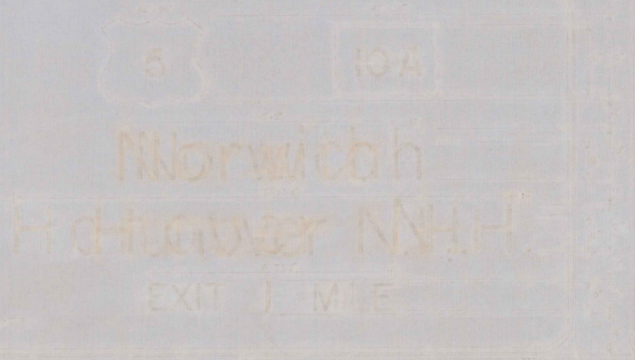
DESIGNED BY:	PIRIE	DATE:	12/65
DRAWN BY:	PIRIE	DATE:	12/65
TRACED BY:	R.L.E.	DATE:	1/66
STAGE 2 CONSTRUCTION			
PAGE:	1	NO. 91-2151	(23)
SHEET 66 OF 129			



SIGNS G-30, G-33 AND G-34 SHALL HAVE A REFLECTORIZED TEXT ON A REFLECTORIZED GREEN BACKGROUND. THE SILVER WHITE REFLECTIVE SHEETING FOR THE EMBOSSED LETTERS AND ARROWS SHALL HAVE A MINIMUM BRIGHTNESS OF 100 CANDLEPOWER PER FT. CANDLE PER SQ. FT. OF MATERIAL AT 0.2° DIVERGENCE ANGLE AND 15° ANGLE OF INCIDENCE.

THE BACKGROUND MATERIAL FOR THESE OVERHEAD SIGNS MAY BE 3/4" HIGH DENSITY OVERLAIN PLYWOOD OR 0.125" FLAT SHEET ALUMINUM OR 14 GAUGE GALVANIZED FLAT SHEET STEEL OR EXTRUDED ALUMINUM PANELS. PLYWOOD OR METAL SHEETS MAY BE MOUNTED BY BOLTING THRU THEM AND THEIR SUPPORTING BEAMS OR BRACKETS.

ROUTE MARKERS AS TEXT SHALL CONFORM WITH SIZES INDICATED ON THE PLANS AND MATERIALS DETAILED ON STANDARD SHEETS E-11, E-12 AND E-13.



SECTION 3

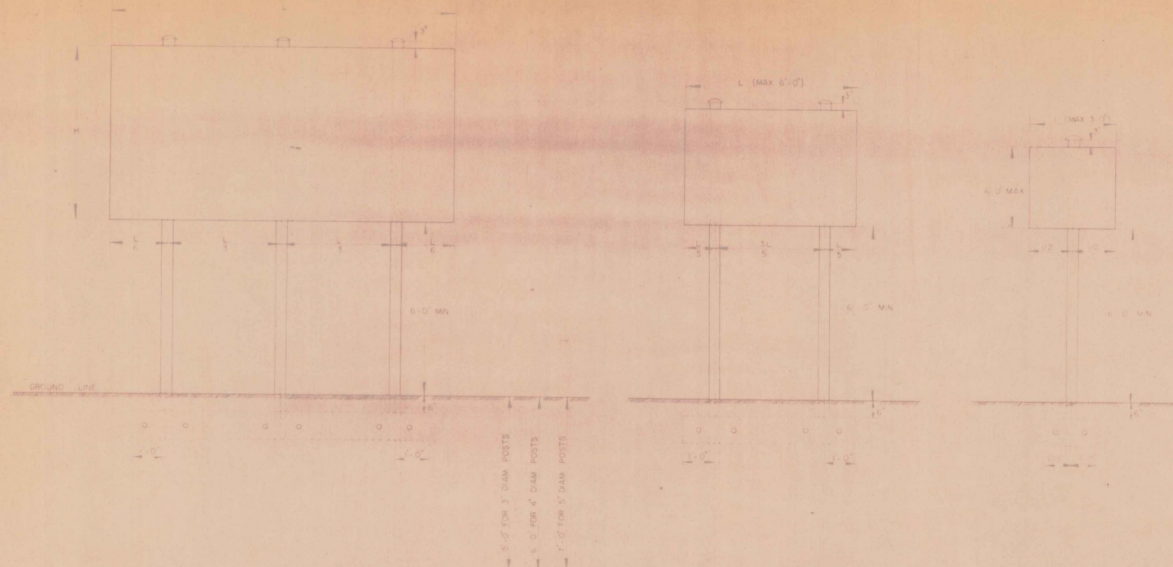
STAGE 2 CONSTRUCTION

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS

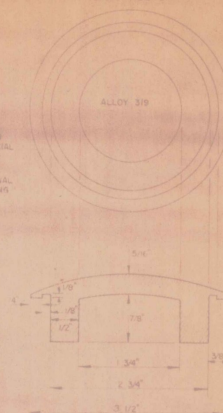
INTERSTATE PROJECT in the town of
NORWICH

TRAFFIC SIGNS
DESIGN AND CONSTRUCTION DETAILS

WEBSTER-MARTIN, INC. CONSULTING ENGINEERS 50 BURLINGTON, VT.		CHECKED BY: AMM IN CHARGE: RAS	SCALE: AS SHOWN DATE: 4/10/85
SURVEYED BY: W-M, INC. DRAWN BY: HCM			
PROJECT NO 191-2(23)		SHEET 89 OF 129	



CAST ALUMINUM CAP FOR
SIGN POSTS



DIMENSIONS SHOWN ARE FOR
5" O.D. & 3/4" I.D. COMMERCIAL
TOLERANCES CAPS DESIGNED
FOR DRIVE PITS
DIMENSIONS ARE PROPORTIONAL
FOR LARGER DIAMETER TUBING

TYPE C FOOTING

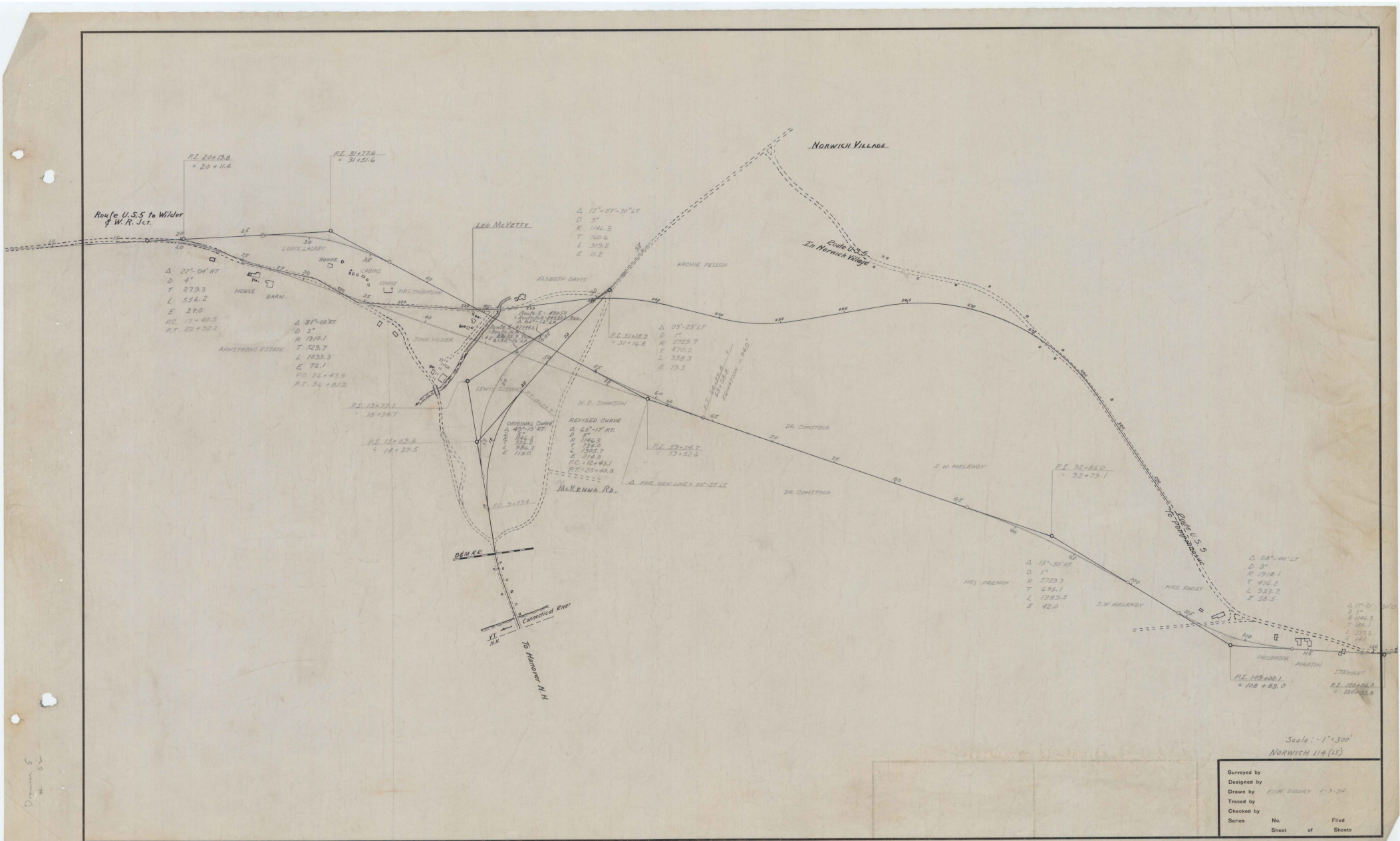
NOTES: THE POSTS FOR THIS APPLICATION SHALL BE EXTRUDED TUBULAR POSTS OF ALUMINUM ALLOY 6061-T6. THE SIGN PANELS SHALL BE LATCHED TO THE POSTS. THE POSTS SHALL BE ALUMINUM OR STAINLESS STEEL OF A STANDARD COMMERCIAL DESIGN APPROVED BY THE DEPARTMENT. THE TUBULAR POSTS SHALL BE APPROVED BY THE DEPARTMENT.

ANCHORS: USE TWO 1/2" DIA. OF 6" LONG ANCHORS WITH DEAGGED, STRAIGHT AND LONG SHANKS IN EACH ANCHOR. THE ANCHORS SHALL BE DRIVEN INTO THE GROUND WITH THE POINT OF THE ANCHOR EXACTLY IN THE CENTER OF THE SIGN PANEL. THE ANCHORS SHALL BE DRIVEN INTO THE GROUND WITH THE POINT OF THE ANCHOR EXACTLY IN THE CENTER OF THE SIGN PANEL. THE ANCHORS SHALL BE DRIVEN INTO THE GROUND WITH THE POINT OF THE ANCHOR EXACTLY IN THE CENTER OF THE SIGN PANEL.

INSTALLATION: ALL POSTS SHALL BE PLACED IN THE GROUND AS SHOWN BY THE END VIEW OF THE FIELD. THE POSTS SHALL BE PLACED IN THE GROUND AS SHOWN BY THE END VIEW OF THE FIELD. THE POSTS SHALL BE PLACED IN THE GROUND AS SHOWN BY THE END VIEW OF THE FIELD.

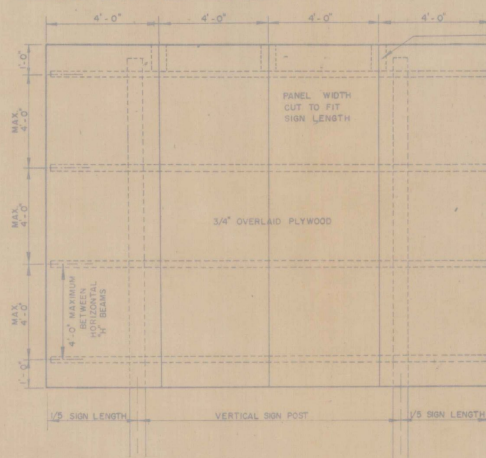
TRAFFIC SIGNS YIELDING TYPE TUBULAR ALUMINUM SIGN SUPPORTS

DESIGNED BY W.H.G. DATE 11/2/58
DRAWN BY W.H.G. DATE 11/2/58
TRACED BY J.A.A. DATE 11/10/58
Hortford - Norwich
POOL I NO 91-2(23)
SHEET 29-A OF 129



MAXIMUM SPACINGS FOR HORIZONTAL "H" BEAMS	
HEIGHT OF SIGN	MIN NO HORIZONTALS
5'-0"	2
6'-0" - 9'-0"	3
10'-0" - 12'-0"	4
13'-0" - 16'-0"	5
17'-0" - 19'-0"	6

FOR SIGNS OVER 10'-0" IN HEIGHT, THE FULL HEIGHT MAY BE OBTAINED WITH PANELS HAVING A SCARFED JOINT (FACTORY JOINED WITH NO BACKING NECESSARY) OR BY COMBINING STANDARD PANELS WITH OTHER SIZES SUCH AS 4'x4', 4'x6' TO OBTAIN THE REQUIRED HEIGHT. WHEN USING ANY OF THESE COMBINATIONS, HOWEVER, LOCATE HORIZONTAL BUTT JOINT AT "H" BEAM FRAMING MEMBER.



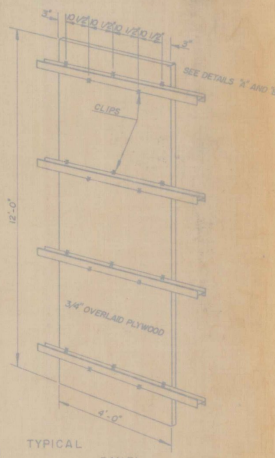
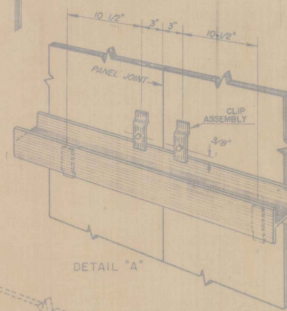
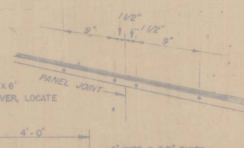
BEFORE ERECTING PLYWOOD SIGNS LARGER THAN 72" WIDE, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL BY THE ENGINEER A DRAWING OF HIS PROPOSED METHOD OF ATTACHING HORIZONTAL BEAMS TO VERTICAL POSTS.

PLYWOOD SIGNS OVER 6' WIDE SHALL BE COMPLETELY REINFORCED BY USE OF STEEL OR ALUMINUM I BEAMS, ANGLE OR TEE GIRTS WITH STAINLESS STEEL OR ALUMINUM CLIPS, DESIGNED TO WITHSTAND A WINDLOAD OF 30 LBS PER SQ. FT.

NOTES:

STAINLESS STEEL OR ALUMINUM CLIPS STARTING 3" FROM SIGN EDGE AND SPACED A MINIMUM OF 5 CLIPS PER 4'-0". CLIPS AND BEAMS TO BE FASTENED BY STAINLESS STEEL OR ALUMINUM ANCHOR NUTS AND STAINLESS STEEL MACHINE SCREWS, BOLTS, NUTS, PLAT AND LOCK WASHERS, LARGE ENOUGH TO CARRY A SIGN LOAD OF 30 LBS PER SQ. FT.

FOR GALVANIZATION, REFER TO SPECIFICATIONS ITEM 545, SECTION 545.02 F



OVERLAID PLYWOOD THICKNESS	
MAXIMUM SIGN WIDTH	MINIMUM PLYWOOD THICKNESS
24"	1/2"
72"	5/8"
OVER 72"	3/4"

FORMULA FOR DETERMINING SIZE OF ALUMINUM OR STEEL I BEAMS, ANGLE OR TEE GIRTS.

HORIZONTAL SIGN SUPPORTS WITH 2 POSTS, VERTICAL SPACING OF HORIZONTAL SIGN SUPPORT, STRINGERS USED WITH ALL FLAT SHEET SIGNS OF ALUMINUM, STEEL OR PLYWOOD, LONGER THAN SIX FEET, IS AS FOLLOWS:

$$V = \frac{55,667 S}{W L^2}$$

V = VERTICAL SPACING IN FT. (NOT TO EXCEED 4 FT.)
S = SECTION MODULUS OF HORIZONTAL STRINGER
W = WINDLOAD PER SQUARE FOOT OF SIGN
L = SIGN LENGTH IN FEET

20,000 P.S.I. = ALLOWABLE BENDING STRESS FOR HORIZONTAL STRINGER.

F. Pina

OVERLAID PLYWOOD
SIGN ASSEMBLY AND
CONSTRUCTION DETAILS

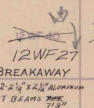
HARTFORD-NORWICH

STAGE 2 CONSTRUCTION

DRAWN BY: A/JR DATE: _____
CHECKED BY: A/JR DATE: _____

PROJ. I NO. 91-2(5)
SHEET 90 OF 129 (23)

TRAFFIC SIGNS, ITEM 701

IDENTIFICATION	NUMBER OF SIGNS	SIZE		TEXT	SIGN SIZE AND TYPE	POSTS		TOTAL SIGN AREA
		WIDTH	HEIGHT			NO. PER SIGN	FOOT-ING	
GA-31	1	15'-0"	6'-0"	THETFORD ST. JOHNSBURY 10 55	10 WF 21 BREAKAWAY	2	A	114 0
GA-12	1	26'-0"	13'-0"	 NORWICH HANOVER N.H. EXIT 1 MILE		3	A	273 0
GA-32	1	9'-0"	4'-0"	NEXT EXIT 4 MILES	MOUNT BELOW GA-12			36 0
GA-15	1	17'-0"	11'-0"	 NORWICH HANOVER N.H. RIGHT LANE	12 WF 27 BREAKAWAY	2	A	187 0
MILEAGE SIGN	2	8'	18"		1.3 LBS DELINEATOR POST	1		2 0
G-30	1	6'-0"	8'-6"	SOUTH 	MOUNT ON US 5 SIGN BRIDGE STA 103+95			51 0
G-33	2	6'-0"	8'-0"	NORTH 	"			96 0
G-34	1	6'-0"	8'-0"	SOUTH 	"			48 0
G-16	1	10'-0"	2'-6"	EXIT 13	2 1/4" x 2 1/4" x 1/4" ALUMINUM OR GALVANIZED TEE BEAM	2	MOUNT ABOVE GA-15	25 0
G-50	2	24"	24"		4" FLANGED CHANNEL	1	B	8 0
G-53	2	21"	9"	SOUTH				2.6 0
G-57	1	21"	15"					2.2 0

COLUMN TOTAL = 844.8 0

TRAFFIC SIGNS, ITEM 701

IDENTIFICATION	NUMBER OF SIGNS	SIZE		TEXT	SIGN SIZE AND TYPE	POSTS		TOTAL SIGN AREA
		WIDTH	HEIGHT			NO. PER SIGN	FOOT-ING	
R-1	1	48"	60"	SPEED LIMIT 65	4" O.D. x 1/4" ALUMINUM TUBES	2	C	20 0
R-2	1	48"	48"	MINIMUM 40			MOUNT BELOW R-1	16 0
R-4	0	48"	60"	SLOWER TRAFFIC KEEP RIGHT	4 1/2"	2	B	0
R-6	0	48"	36"	EMERGENCY STOPPING ONLY	4" x 3 1/2" x 5 1/8" L	2	B	0
R-17	3	48"	60"	DO NOT PASS	4" x 3 1/2" x 5 1/8" ANGLE	2	B	60 0
R-18	1	48"	60"	TWO WAY TRAFFIC AHEAD				20 0
R-19	1	48"	48"	KEEP RIGHT				16 0
R-20	1	60"	48"	WRONG WAY (WHITE ON RED)	5" O.D. x 3/8" ALUMINUM TUBES	2	X	20 0
R-21	1	48"	48"	DO NOT ENTER	MOUNT ABOVE R-20			16 0
R-22	1	48"	60"	KEEP RIGHT 	4" FLANGED CHANNEL	2	B	20 0
R-24	1	48"	48"	STOP	4" FLANGED CHANNEL	2	B	16 0
GA-23	1	12'-0"	6'-0"	FOOD-PHONE GAS-LODGING NEXT RIGHT	6 WF 15.5 BREAKAWAY	2	A	72 0
G-37	4	24"	24"		4" FLANGED CHANNEL	1	B	16 0
G-42	2	21"	9"	SOUTH				2.6 0
G-43	2	21"	15"	JCT				4.4 0
G-44	1	21"	15"					2.2 0

COLUMN TOTAL = 301.2 0
+ COLUMN 1 = 844.8 0
SHEET TOTAL = 1146.0 0

DELINEATORS, ITEM 702

PART	NUMBER OF PLACQUES	SIZE		TEXT	PART	NUMBER OF PLACQUES	SIZE		TEXT
		WIDTH	HEIGHT				WIDTH	HEIGHT	
A	29	3.5"	6"	75	B	2	3.5"	6"	75
A	20	3.5"	6"	76	B	2	3.5"	6"	80
TOTAL	49				B	2	3.5"	6"	85
					B	2	3.5"	6"	90
B	2	3.5"	6"	05	B	2	3.5"	6"	95
B	2	3.5"	6"	10	TOTAL	49			
B	2	3.5"	6"	15					
B	2	3.5"	6"	20					
B	3	3.5"	6"	25					
B	4	3.5"	6"	30					
B	4	3.5"	6"	35					
B	4	3.5"	6"	40					
B	4	3.5"	6"	45					
B	4	3.5"	6"	50					
B	2	3.5"	6"	55					
B	2	3.5"	6"	60					
B	2	3.5"	6"	65					
B	2	3.5"	6"	70					

SUMMARY OF DELINEATORS, ITEM 702
TYPE I DELINEATORS, WITH PLACQUES 49
TYPE II DELINEATORS, DOUBLE AMBER 0
TYPE III DELINEATORS, TRIPLE AMBER 0
TYPE I DELINEATORS (PLAIN) 54

IDENTIFICATION OF TRAFFIC SIGNS

Traffic signs are identified on these plans by a number prefixed by a letter which indicates the following general classifications:

- GA - Large size guide signs
- G - Other guide signs
- R - Regulatory signs
- W - Warning signs

Traffic sign assemblies which consist of groups of signs mounted together, are identified by a letter - such as ASSEMBLY "A" - and the individual signs comprising the assembly are identified by their individual sign numbers.

ALL STEEL SIGN POSTS SHALL BE GALVANIZED.
ALL ALUMINUM TUBES SHALL BE 6061-T6 ALUMINUM ALLOY

STA 3996+00 TO STA 4063+75

NORWICH

TRAFFIC SIGN AND DELINEATOR SUMMARY SHEET

DESIGNED BY: LKL DATE: 4/55
DRAWN BY: LKL DATE: 5/55
TRACED BY: LKL DATE: 5/55
STAGE 2
PROJ. I NO. 91-2(23)
SHEET 71 OF 129

TRAFFIC SIGNS, ITEM 701

IDENTIFICATION	NUMBER OF SIGNS	SIZE		TEXT	SIGN POSTS			TOTAL SIGN AREA
		WIDTH	HEIGHT		SIZE AND TYPE	NO. PER SIGN	FOOTING	
GA-12	1	21'-0"	13'-0"	(5) 10 A Norwich Hanover N.H. EXIT 1 MILE	12 WF 27 BREAKAWAY	1/3	A	273 1/2
GA-14		16'-6"	12'-0"	(5) 10 A Norwich Hanover N.H.	12 WF 31	2	A	4
GA-15	1	17'-0"	11'-0"	(5) 10 A Norwich Hanover N.H. RIGHT LANE	12 WF 27 BREAKAWAY	2	A	187 1/2
GA-18	1	12'-0"	9'-0"	(9) NORTH Thetford St. Johnsbury	5" ALUM. TUBES w/ 3/8" WALL 6061 T6 ALLOY	2	A	108 1/2
GA-19	1	12'-0"	9'-0"	(9) NORTH Thetford St. Johnsbury	5" ALUM. TUBES w/ 3/8" WALL MOUNTED ON BACK OF CANE SIGN POSTS 6061 T6 ALLOY	3	C	108 1/2
GA-20	1	13'-6"	7'-0"	(9) SOUTH Wilder White River Jct.	6 WF 15.5 BREAKAWAY	2	A	94.5 1/2
GA-21	1	13'-0"	6'-0"	← Norwich Hanover N.H. Dartmouth College →	6 BL 12 BREAKAWAY	2	A	78 1/2
GA-22	1	13'-0"	6'-0"	← Hanover N.H. Dartmouth College → Norwich →	6 BL 12 BREAKAWAY	2	A	78 1/2
G-47	1	4'-0"	6'-0"	SOUTH (9) RIGHT LANE	4" O.D. x 3/8" ALUMINUM TUBES ALLOY 6061-T6	2	C	24 1/2
G-48	1	4'-0"	6'-0"	SOUTH (9) LEFT LANE	4" O.D. x 3/8" ALUMINUM TUBES	2	C	24 1/2
G-49		4'-0"	6'-0"	NORTH (9) LEFT LANE	4" O.D. x 3/8" ALUMINUM TUBES	2	C	0

COLUMN TOTAL = 974.5 1/2

TRAFFIC SIGNS, ITEM 701

IDENTIFICATION	NUMBER OF SIGNS	SIZE		TEXT	SIGN POSTS			TOTAL SIGN AREA
		WIDTH	HEIGHT		SIZE AND TYPE	NO. PER SIGN	FOOTING	
GA-13	1	9'-0"	4'-0"	NEXT EXIT 10 MILES	MOUNT BELOW GA-12	2-2 1/4 x 2 1/4 ALUM. TUBES 7'3"		36 1/2
GA-17	1	20'-0"	6'-0"	Wilder White River Jct. 4	8 WF 17 BREAKAWAY	2	A	120 1/2
GA-16	2	10'-0"	2'-6"	EXIT 12	2 1/2 x 2 1/2 x 1/4" ALUMINUM OR GALVANIZED TEE BEAM	2	MOUNT ABOVE GA-12, 8 GA-15	50 1/2
G-24	2	6'-0"	5'-0"	EXIT 12	4" x 3.3" ALUMINUM Z BEAM	2	B	60 1/2
G-25	1	8'-0"	4'-0"	ENTERING TOWN OF Norwich	5" O.D. x 3/8" ALUMINUM TUBES	2	C	32 1/2
G-26	1	8'-0"	4'-0"	ENTERING TOWN OF Hartford	5" O.D. x 3/8" ALUMINUM TUBES	2	C	32 1/2
GA-23	1	12'-0"	6'-0"	FOOD-PHONE GAS-LODGING NEXT RIGHT	6 WF 15.5 BREAKAWAY	2	A	72 1/2
G-39	1	30"	15"	SOUTH				3.1 1/2
G-38	1	30"	15"	NORTH				3.1 1/2
G-37	2	36"	36"	(91)	4" x 3 1/2 x 5/16" ANGLE	1	B	18 1/2
G-40	2	24"	24"					8 1/2
G-41	1	21"	9"	NORTH				1.3 1/2
G-42	1	21"	9"	SOUTH				1.3 1/2
G-44	0	21"	15"	↑				
G-45	1	21"	15"	↓			B	2.2 1/2
MILE 74	2	8"	18"	7 4	DELINEATOR POST	1	B	2 1/2
MILE 75	2	8"	18"	7 5	DELINEATOR POST	1	B	2 1/2
G-50	3	24"	24"	(5)				12 1/2
G-51	3	30"	24"	10 A				15 1/2
G-52	1	21"	9"	NORTH			B	1.3 1/2
G-53	1	21"	9"	SOUTH			B	1.3 1/2
G-54	2	21"	9"	EAST			B	2.6 1/2
G-56	1	31"	15"	↑				2.2 1/2
G-57	5	21"	15"	↓				11 1/2

COLUMN TOTAL = 488.4 1/2
+ COLUMN 1 = 974.5 1/2
SHEET TOTAL = 1462.9 1/2

DELINEATORS, ITEM 702

PART	NUMBER OF PLATES	SIZE	TEXT
A	26	3 1/2" x 4 1/2"	73
A	32	3 1/2" x 4 1/2"	74
A	5	3 1/2" x 4 1/2"	75
B	4	3 1/2" x 6"	70
B	4		75
B	3		80
B	3		85
B	3		90
B	4		95
B	3	3 1/2" x 6"	05
B	3		10
B	3		15
B	3		20
B	3		25
B	2		30
B	4		35
B	4		40
B	4		45
B	4		50
B	3		55
B	3		60
B	3		65

SUMMARY OF DELINEATORS, ITEM 702
TYPE I DELINEATORS, WITH PLATES 63
TYPE II DELINEATORS, DOUBLE AMBER 77
TYPE III DELINEATORS, TRIPLE AMBER 36
TOTAL = 176

IDENTIFICATION OF TRAFFIC SIGNS

Traffic signs are identified on these plans by a number prefixed by a letter which indicates the following general classifications:

- GA - Large size guide signs
- G - Other guide signs
- R - Regulatory signs
- W - Warning signs

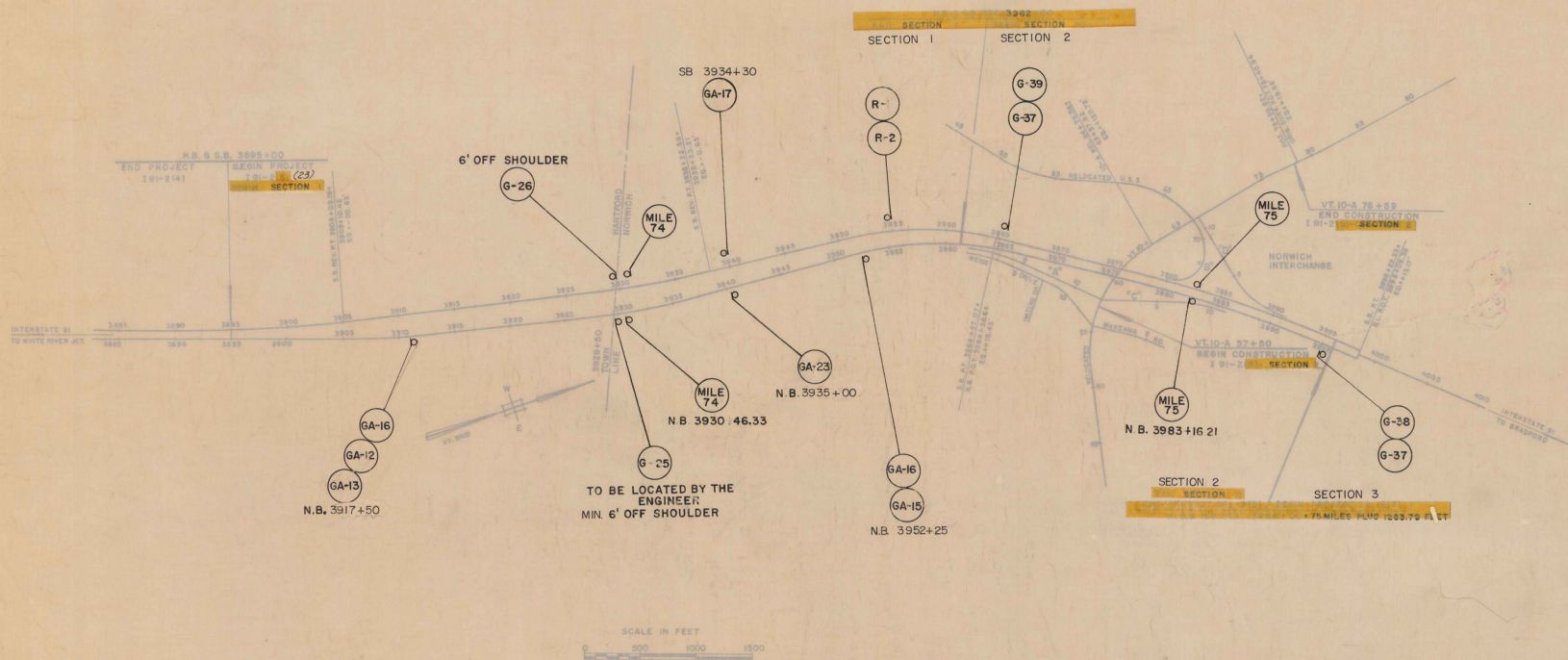
Traffic sign assemblies which consist of groups of signs mounted together, are identified by a letter- such as "ASSEMBLY A"- and the individual signs comprising the assembly are identified by their individual sign numbers.

SIGN POST HARDWARE: ALL SIGNS AND ASSEMBLIES ARE TO BE MOUNTED ON SIGN POSTS BY 3/8 DIAM. STAINLESS STEEL BOLTS, WASHERS AND ELASTIC STOP NUTS. ALL FLAT SHEET SIGNS HAVE A 1" O.D. x 7/16" I.D. FLAT WASHER UNDER THE BOLT HEAD AND PLYWOOD SIGNS ALSO HAVE A SPRING LOCK WASHER UNDER THE STOP NUT. COMMERCIAL PANELS KNOWN AS "EXTRUSHEET" IN MULTIPLE WIDTHS AND MEETING THE STRENGTH REQUIREMENTS FOR ALUMINUM SIGNS ON THIS PROJECT MAY BE USED ON THIS PROJECT.

STA 3895+00 TO STA 3996+00

HARTFORD-NORWICH

TRAFFIC SIGN
AND DELINEATOR
SUMMARY SHEETDESIGNED BY: FURE DATE: 12/82
DRAWN BY: FURE DATE: 12/82
TRACED BY: FURE DATE: 1/83
STAGE 2 CONSTRUCTION
PROJ. I NO. 91-2
SHEET 22 OF 229 (23)



APPROXIMATE SIGN LOCATIONS

GA SIGNS ON THIS PROJECT ADJACENT TO THE THRUWAY, ARE TO BE LOCATED 30 FEET FROM THE EDGE OF THE SLOW SPEED LANE. LOCATIONS HAVE BEEN FIELD CHECKED.

HARTFORD-NORWICH			
DESIGNED BY:	PIRIE	DATE:	11/65
DRAWN BY:	PIRIE	DATE:	11/65
TRACED BY:	R.L.E.	DATE:	1/66
STAGE 2 CONSTRUCTION			
PROJECT NO.	91-2	SHEET	94 OF 129 (23)

U.S. 5 STA. 44+00
END PROJECT FO41-3(3)

U.S. 5
TO WHITE RIVER JCT.

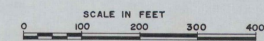
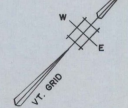
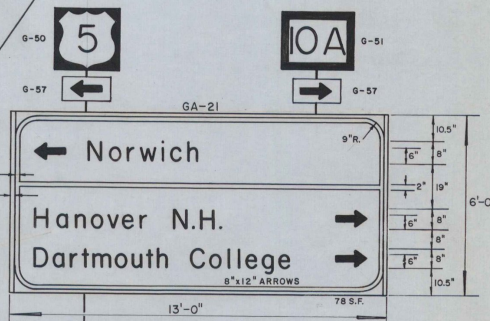
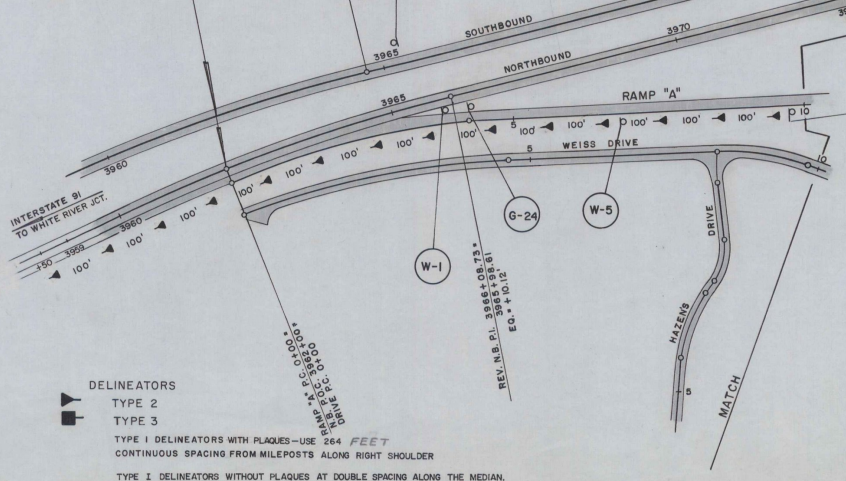
45 50 55 60 65 67

SIGNS GA-21 AND GA-22 SHALL HAVE NON-REFLECTORIZED
BLACK TEXT ON A WHITE SIGN BACKGROUND OF REFLECTIVE
SHEETING.
THE LETTERS (STANDARD MODIFIED SERIES E)
AND ARROWS SHALL BE EMBOSSED ALUMINUM.

PROJECT 191-215
N.B. S.S. 3902+00
END SECTION 1 BEGIN SECTION 2

REV. S.S. P.L. 3964+00
EQ. 14-43

G-39
G-37



APPROXIMATE SIGN AND
DELINEATOR LOCATIONS
AND SIGN DESIGN.

NORWICH NORWICH INTERCHANGE

DESIGNED BY: PIRIE DATE: 12/65
DRAWN BY: PIRIE DATE: 12/65
TRACED BY: R.L.E. DATE: 1/66
STAGE 2 CONSTRUCTION
PROJ. I NO. 91-2
SHEET 96 OF 129

Vermont Agency of
Transportation
PHASE 1-INTERSTATE
#122302-01
INITIALS ☐
HANGER 625

Hartford-Norwich
I-91-2 (23)

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1967

1967