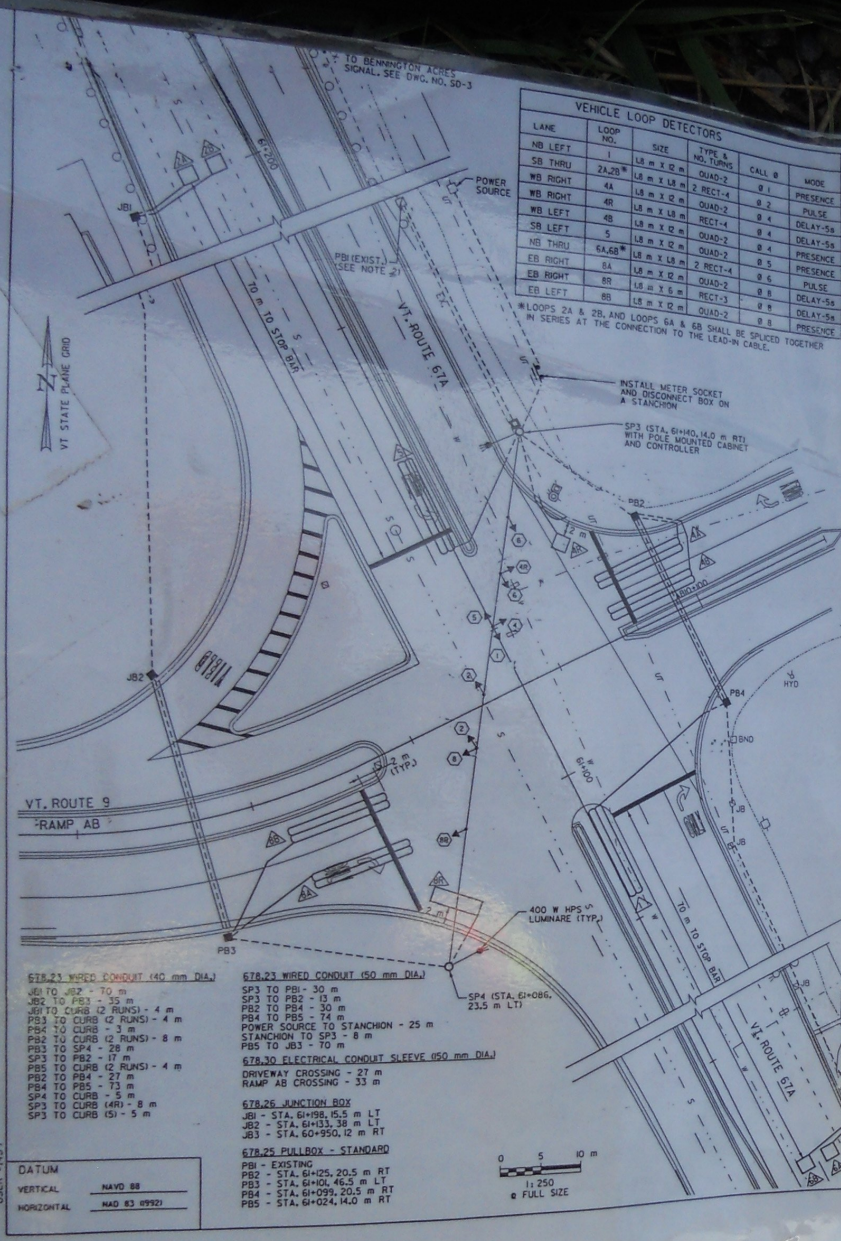


VEHICLE LOOP DETECTORS

LANE	LOOP NO.	SIZE	TYPE & NO. TURNS	CALL Ø	MODE	INDUCTANCE (μH) CALCULATED	INDUCTANCE (μH) MEASURED	RESISTANCE Ω @ 25°C CALCULATED	RESISTANCE Ω @ 25°C MEASURED	(MΩ) LEAKAGE TO GROUND
NB LEFT	1	1.8 m x 12 m	QUAD-2	Ø1	PRESENCE	386		1.19		
SB THRU	2A,2B*	1.8 m x 1.8 m	2 RECT-4	Ø2	PULSE	354		1.31		
WB RIGHT	4A	1.8 m x 12 m	QUAD-2	Ø4	DELAY-5s	350		0.72		
WB RIGHT	4R	1.8 m x 1.8 m	RECT-4	Ø4	DELAY-5s	143		0.22		
WB LEFT	4B	1.8 m x 12 m	QUAD-2	Ø4	PRESENCE	354		0.77		
SB LEFT	5	1.8 m x 12 m	QUAD-2	Ø5	PRESENCE	351		0.73		
NB THRU	6A,6B*	1.8 m x 1.8 m	2 RECT-4	Ø6	PULSE	378		1.63		
EB RIGHT	8A	1.8 m x 12 m	QUAD-2	Ø8	DELAY-5s	409		1.48		
EB RIGHT	8R	1.8 m x 6 m	RECT-3	Ø8	DELAY-5s	204		1.00		
EB LEFT	8B	1.8 m x 12 m	QUAD-2	Ø8	PRESENCE	413		1.54		

*LOOPS 2A & 2B, AND LOOPS 6A & 6B SHALL BE SPLICED TOGETHER IN SERIES AT THE CONNECTION TO THE LEAD-IN CABLE.

ALL CALCULATED VALUES ARE AT THE CONTROLLER. MEASURED VALUES MUST BE FILLED IN PRIOR TO TEST PERIOD.

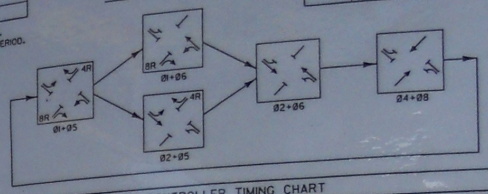
SIGNAL FACE ARRANGEMENT 300mm LENSES

FACES 1,5 — FACES 2,4,6,8 — FACES 4R,8R

LEGEND

EXISTING	NEW	DESCRIPTION
		UTILITY POLE
		LUMINAIRE
		LIGHT OR WOOD POLE
		STRAIN POLE
		CONTROLLER CABINET
		PULLBOX/JUNCTION BOX
		SIGNAL HEAD
		CONDUIT
		VEHICLE LOOPS
		PEDESTAL POST
		OVERHEAD TRAFFIC SIGN
		STANCHION

PHASING DIAGRAM



YEAR 2000 - AVERAGE WEEKDAY TRAFFIC VOLUMES

*DESIGN HOUR VOLUMES FOR THE YEAR 2020

CONTROLLER TIMING CHART

LOCAL PROGRAMMING	PHASE 1	2	3	4	5	6	7	8
MINIMUM GREEN	8	17		12	8	17		12
EXTENSION	2.0	5.0		2.0	2.0	5.0		2.0
YELLOW CLEARANCE	4.0	4.0		4.0	4.0	4.0		4.0
ALL RED CLEARANCE	2.0	2.0		2.0	2.0	2.0		2.0
MAX. GREEN 1	14	29		29	14	29		29
WALK	-	-		-	-	-		-
FLASHING DON'T WALK	-	-		-	-	-		-
RECALL	OFF	MINIMUM		OFF	OFF	MINIMUM		OFF
MEMORY	LOCK	LOCK		NON-LOCK	LOCK	LOCK		NON-LOCK

COORDINATION DATA CHART

CYCLE	SPLIT 1	2	3	4	5	6	7	8	OFFSET
CYCLE 1 - 90 SEC. 6:00 AM - 9:00 AM	20s/22%	35s/39%		35s/39%	20s/22%	35s/39%		35s/39%	10s/11%
CYCLE 2 - 90 SEC. 9:00 AM - 10:00 PM	20s/22%	35s/39%		35s/39%	20s/22%	35s/39%		35s/39%	8s/9%
FREE OPERATION 10:00 PM - 12:00 AM									
FLASHING MODE 12:00 AM - 6:00 AM									

TABLE OF CHANGE SEQUENCE

FACE	R/W	Ø1+Ø5 CLEAR TO Ø1+Ø6	Ø2+Ø5	Ø2+Ø6	R/W	Ø1+Ø6 CLEAR TO Ø2+Ø6	R/W	Ø2+Ø5 CLEAR TO Ø2+Ø6	R/W	Ø2+Ø6 CLEAR TO Ø1+Ø6	Ø2+Ø5	ALL OTHERS	R/W	Ø4+Ø8 CLEAR TO ALL OTHERS	FLASHING OPERATION
1	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
2	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FY
4	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	FR
4R	R/G	R	R	R/G	R/G	R	R	R	R	R	R	R	R	R	FY
5	G	G	G	G	G	G	R	R	R	R	R	R	G	Y	FR
6	R	R	R	R	R	R	R	G	G	G	G	G	Y	R	FR
8	R	R	R	R	R	R	R	R	R	R	R	R	G	G	FY
8R	R/G	R/G	R/G	R	R	R	R/G	R	R	R	R	R	G	Y	FR

NOTES:

1. OFFSETS ARE REFERENCED TO BEGINNING OF VT ROUTE 67A GREEN (Ø2+Ø6)
2. THE EXISTING INTERCONNECT CABLE SHALL BE DISCONNECTED FROM THE EXISTING CONTROLLER AND PULLED BACK TO PB1. THIS CABLE SHALL THEN BE RUN THROUGH NEW CONDUIT TO THE PROPOSED CONTROLLER ON SP3. THIS WORK SHALL BE PAID FOR AS PART OF ITEM 678.23
3. DIMENSIONS ARE MEASURED TO FACE OF CURB UNLESS SPECIFIED OTHERWISE.

678.23 WIRED CONDUIT (40 mm DIA.)
JB1 TO JB2 - 70 m
JB2 TO PB3 - 35 m
JB1 TO CURB (2 RUNS) - 4 m
PB3 TO CURB (2 RUNS) - 4 m
PB4 TO CURB - 3 m
PB2 TO CURB (2 RUNS) - 8 m
PB3 TO SP4 - 28 m
SP3 TO PB2 - 17 m
PB5 TO CURB (2 RUNS) - 4 m
PB2 TO PB4 - 27 m
PB4 TO PB5 - 73 m
SP4 TO CURB - 5 m
SP3 TO CURB (4R) - 8 m
SP3 TO CURB (5) - 5 m

678.23 WIRED CONDUIT (50 mm DIA.)
SP3 TO PB1 - 30 m
SP3 TO PB2 - 13 m
PB2 TO PB4 - 30 m
PB4 TO PB5 - 74 m
POWER SOURCE TO STANCHION - 25 m
STANCHION TO SP3 - 8 m
PB5 TO JB3 - 70 m

678.30 ELECTRICAL CONDUIT SLEEVE (150 mm DIA.)
DRIVEWAY CROSSING - 27 m
RAMP AB CROSSING - 33 m

678.26 JUNCTION BOX
JB1 - STA. 61+198, 15.5 m LT
JB2 - STA. 61+133, 38 m LT
JB3 - STA. 60+950, 12 m RT

678.25 PULLBOX - STANDARD
PB1 - EXISTING
PB2 - STA. 61+125, 20.5 m RT
PB3 - STA. 61+101, 46.5 m LT
PB4 - STA. 61+099, 20.5 m RT
PB5 - STA. 61+024, 14.0 m RT

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (1992)

FILE NAME =u:\51\vrout\ent-actited-ab.dgn
DATE/TIME =07 SEP 2000
USER =14591

TRAFFIC SIGNAL PLAN

SURVEYED BY C.H.A. & V.S.E. DATE 12/93
DESIGNED BY M.R.W. DATE 9/00
DRAWN BY K.H.O. DATE 9/00
CHECKED BY T.P.K. DATE 9/00
DESIGN FILE NO. TSD-AB.DGN
PROJ. NAME BENNINGTON - HOOSICK D.P.J. 0146(1) C/4
PROJ. NO. P.J.N. 1306.60
DWG. NO. SD-2