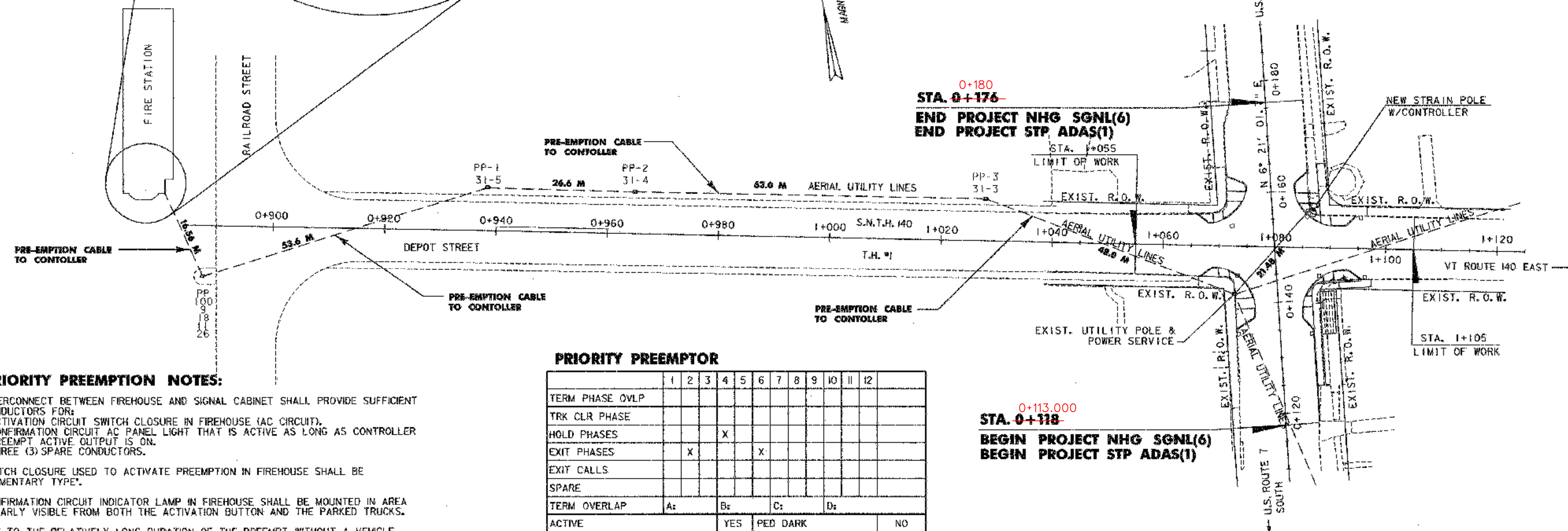
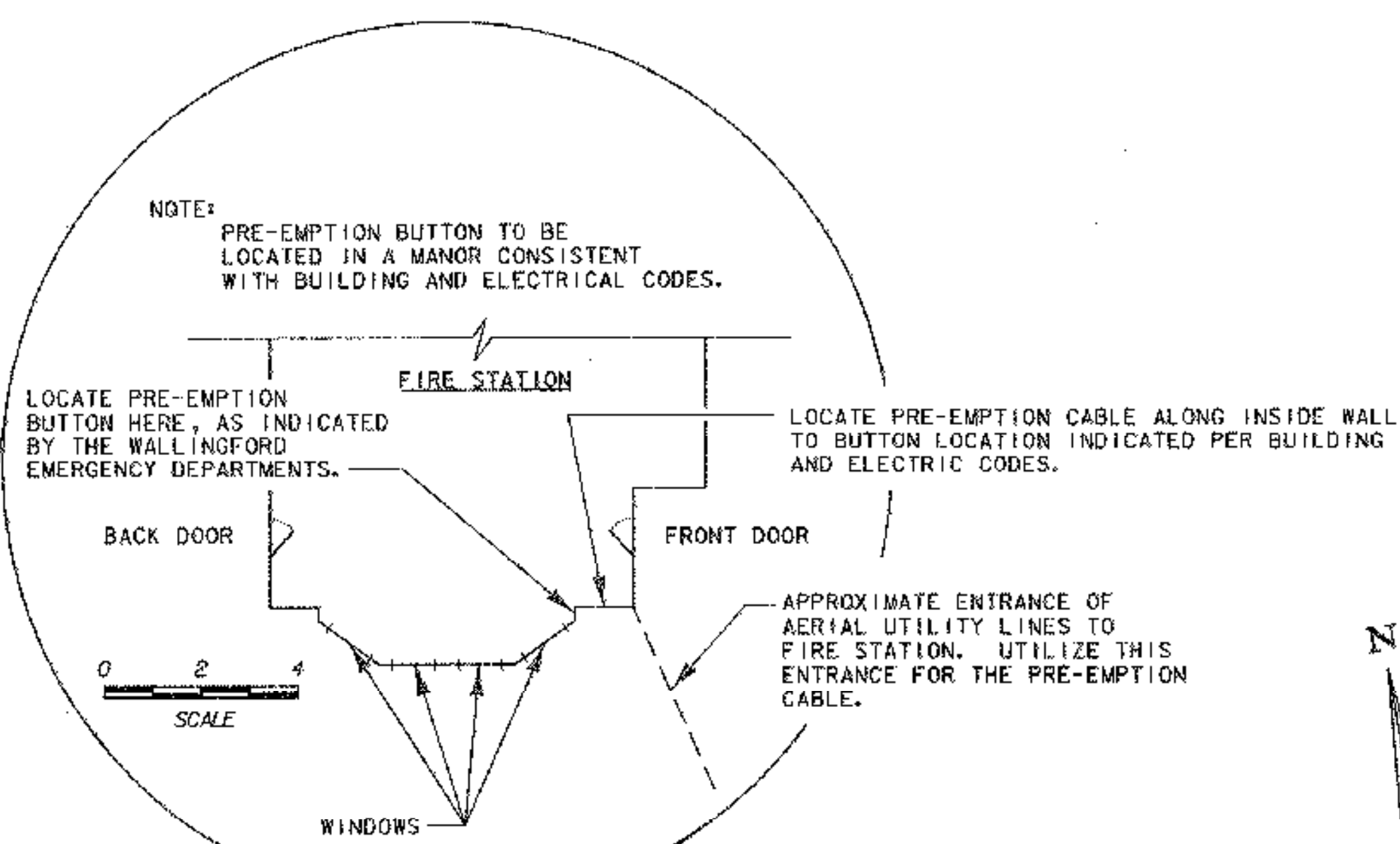


GENERAL:

- A. VERMONT AGENCY OF TRANSPORTATION (VTTRANS) SHALL DRAFT A MEMORANDUM OF UNDERSTANDING (MOU) DOCUMENTING RESPONSIBILITIES OF BOTH FIRE DEPARTMENT AND VTTRANS WITH REGARD TO LIABILITY, MAINTENANCE, AND TRAINING. INSTALLATION OF PREEMPTION EQUIPMENT SHALL NOT COMMENCE UNTIL MOU IS SIGNED BY ALL APPROPRIATE PARTIES.
- B. CONTACT PERSON FOR FIRE DEPARTMENT SHALL BE DOCUMENTED IN TRAFFIC SIGNAL CABINET FOR VTTRANS TO CONTACT TO ADVISE OF PROBLEMS AND CHANGES IN CONFIGURATION.
- C. VTTRANS (OR DESIGNATED REPRESENTATIVE) SHALL CONDUCT TRAINING FOR FIRE DEPARTMENT WITHIN 60 DAYS OF COMPLETED PREEMPTION WORK.
- D. HARDWARE PRE-EMPTION TO BE AERIAL MOUNTED ON EXISTING UTILITY POLES FROM THE U.S. ROUTE 7 / VT. ROUTE 140 INTERSECTION TO THE WALLINGFORD FIRE STATION. ATTACHMENT OF PRE-EMPTION CABLE TO EXISTING UTILITY POLES TO BE COORDINATED WITH UTILITY COMPANY.
- E. PAYMENT FOR THIS SYSTEM (INCLUDING TESTING & FINE TUNING) SHALL BE SUBSIDIARY TO THE SIGNAL INSTALLATION ITEM 678.15 FOR ALL REQUIRED WORK.



PRIORITY PREEMPTION NOTES:

- A. INTERCONNECT BETWEEN FIREHOUSE AND SIGNAL CABINET SHALL PROVIDE SUFFICIENT CONDUCTORS FOR:
 1. ACTIVATION CIRCUIT SWITCH CLOSURE IN FIREHOUSE (AC CIRCUIT).
 2. CONFIRMATION CIRCUIT AC PANEL LIGHT THAT IS ACTIVE AS LONG AS CONTROLLER PREEMPT ACTIVE OUTPUT IS ON.
 3. THREE (3) SPARE CONDUCTORS.
- B. SWITCH CLOSURE USED TO ACTIVATE PREEMPTION IN FIREHOUSE SHALL BE "MOMENTARY TYPE".
- C. CONFIRMATION CIRCUIT INDICATOR LAMP IN FIREHOUSE SHALL BE MOUNTED IN AREA CLEARLY VISIBLE FROM BOTH THE ACTIVATION BUTTON AND THE PARKED TRUCKS.
- D. DUE TO THE RELATIVELY LONG DURATION OF THE PREEMPT WITHOUT A VEHICLE PRESENT, INTERSECTION SHALL HAVE ROTATING RED BEACON THAT IS ACTIVE WHEN THE CONTROLLER PREEMPT ACTIVE OUTPUT IS ON.
- E. TWO (2) RELAYS SHALL BE PROVIDED IN THE TRAFFIC SIGNAL CABINET (ACTIVATION CIRCUIT AND CONFIRMATION CIRCUIT). CONFIRMATION RELAY SHALL BE SUFFICIENTLY LARGE TO ACCOMMODATE PEAK CURRENT DEMANDS OF BOTH THE FIREHOUSE CONFIRMATION LAMP(S) AND THE INTERSECTION ROTATION BEACON.
- F. CONTROLLER PREEMPTION SHALL BE PROGRAMMED AS FOLLOWS:
 1. A FIVE-SECOND DELAY WILL BE CONFIGURED TO PREVENT ELECTRICAL NOISE ON THE ACTIVATION CIRCUIT FROM CAUSING FALSE ALARM.
 2. NO MINIMUM GREEN TIMES OR PEDESTRIAN CLEARANCE INTERVALS SHALL BE TRUNCATED.
 3. PREEMPTION "HOLD PHASE" SHALL BE PHASE 4.
 4. NO PEDESTRIAN MOVEMENTS SHALL BE ALLOWED DURING PREEMPTION.
 5. PREEMPTION HOLD TIME WILL BE CONFIGURED TO BE 90 SECONDS BASED UPON THE ESTIMATED WORST CASE TIME FOR THE EMERGENCY VEHICLE TO CLEAR THE INTERSECTION.
 6. MINIMUM PREEMPTION RE-SERVICE TIME SHALL BE CONFIGURED TO BE 5 MINUTES.
- G. PANEL IN FIREHOUSE SHALL BE LABELED WITH CRITICAL PREEMPTION CHARACTERISTICS SUCH AS DELAY, TRANSITION, HOLD, AND MINIMUM RE-SERVICE TIMES.
- H. PREEMPTION CIRCUIT SHALL BE TESTED ON A MONTHLY BASIS FOR A VOLUNTEER FIRE DEPARTMENT.
- I. THE FIRE HOLD AND DURATION SETTINGS SHALL BE DETERMINED IN THE FIELD BASED ON AT LEAST FOUR(4) TEST RUNS (AM, NOON, PM AND OFF PEAK). THE TEST RUNS SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER, FIRE DEPT., MUNICIPAL OFFICIAL(S), AND DISTRICT TRANSPORTATION ADMINISTRATOR.

PRIORITY PREEMPTOR

	1	2	3	4	5	6	7	8	9	10	11	12
TERM PHASE OVL												
TRK CLR PHASE												
HOLD PHASES				X								
EXIT PHASES		X				X						
EXIT CALLS												
SPARE												
TERM OVERLAP	A:		B:		C:		D:					
ACTIVE	YES		PED DARK				NO					
PRIORITY			PED ACTIVE				NO					
GET LOCK			ZERO PC TIME				NO					
HOLD FLASH			PC THRU YELLOW				NO					
TERM OVL AP			TERM PHASES									
DON'T OVERRIDE FLASH			X		ACTIVE ONLY DURING HOLD							
FLASH ALL OUTPUTS			NO CVM IN FLASH									
YELLOW RED GOES GREEN			FAST FLASH GRN ON HOLD									
ENABLE MAX PREEMPT TIME			X		OUT OF FLASH							
MAX TIME	360 SEC		DURATION TIME									
MIN HOLD TIME	90 SEC		DELAY TIME				5 SEC					
MIN PED CLEAR	8 SEC		INHIBIT TIME									
EXIT MAX			HOLD DELAY TIME									
	GREEN		YELLOW		RED							
MINIMUM	0		0		0							
TRACK CLEAR												
HOLD												

0+113.000
STA. 0+118
 BEGIN PROJECT NHG SGNL(6)
 BEGIN PROJECT STP ADAS(1)

NOTES:
 1. HARDWARE PRE-EMPTION TO BE AERIAL MOUNTED ON EXISTING UTILITY POLES FROM ROUTE 140/US 7 INTERSECTION TO THE WALLINGFORD FIRE STATION.

2. ATTACHMENT OF PRE-EMPTION CABLE TO POLES TO BE COORDINATED WITH UTILITY COMPANY.

3. ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED



PROJECT NAME: WALLINGFORD
 PROJECT NUMBER: NHG SGNL(26)S/STP ADAS(2)
 FILE NAME: zc294frm.dgn
 PROJECT LEADER: GAS
 DESIGNED BY: RAW / JCO
 PLOTTING: MBL
 CHECKED BY: GAS
 PREEMPTION DETAIL SHEET
 SHEET 16 OF 25

SCALE 0 10 20