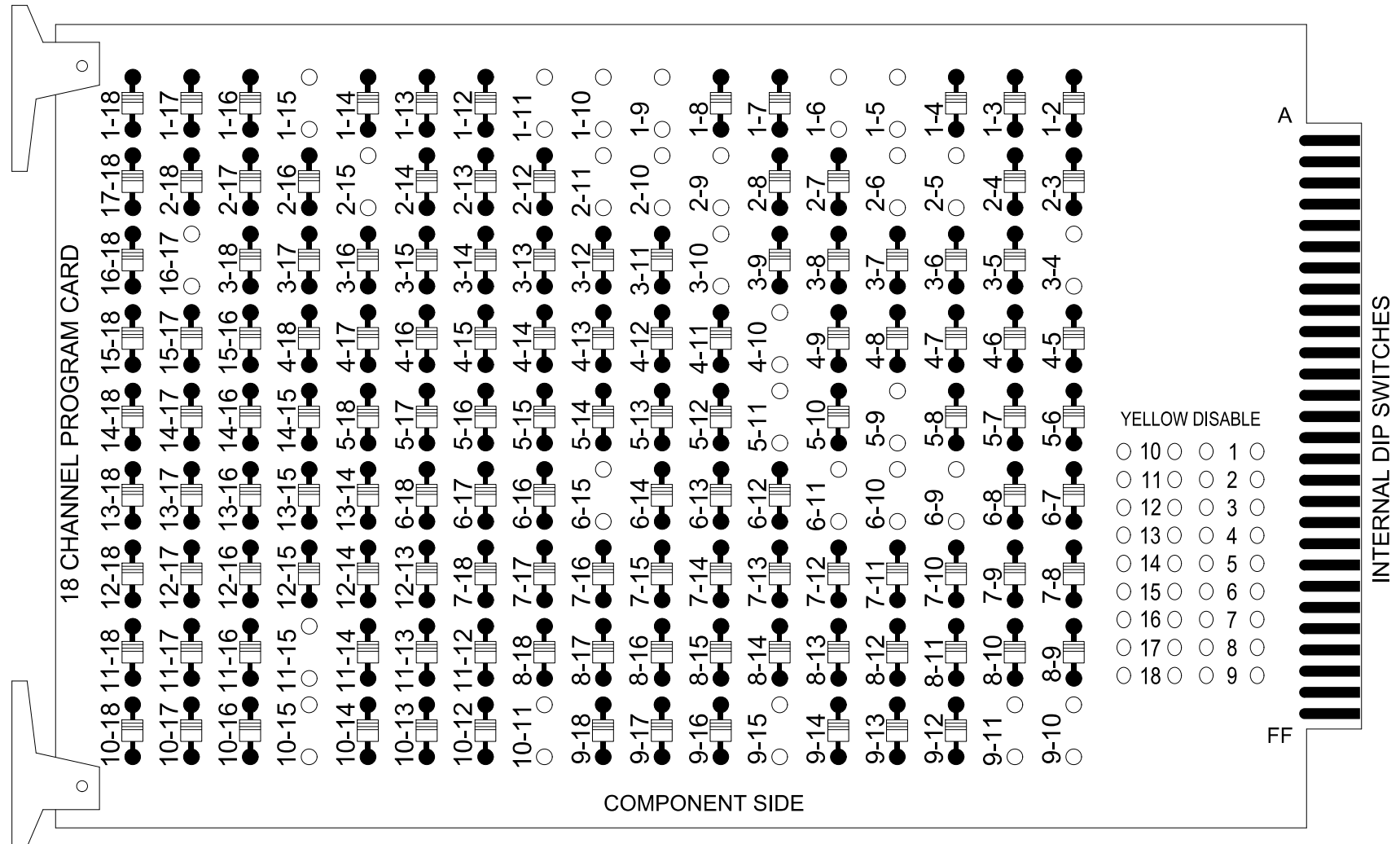


18 CHANNEL IP CONFLICT MONITOR
PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

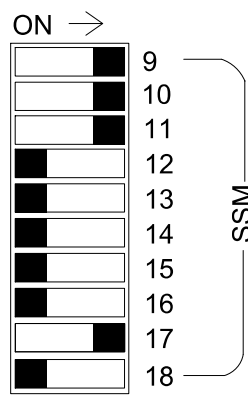
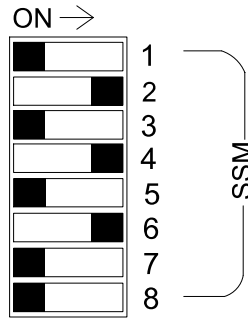
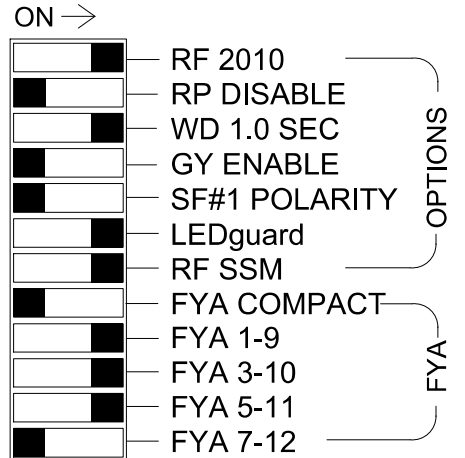
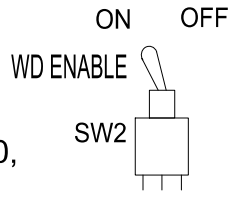
REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-10, 1-11, 1-15, 2-5, 2-6, 2-9, 2-10, 2-11, 2-15, 3-4, 3-10, 4-10, 5-9, 5-11, 6-9, 6-10, 6-11, 6-15, 9-10, 9-11, 9-15, 10-11, 10-15, 11-15, and 16-17.



REMOVE JUMPERS AS SHOWN

NOTES:

- Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
- Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
- Ensure that the Red Enable is active at all times during normal operation.
- Integrate monitor with Ethernet network in cabinet.



■ = DENOTES POSITION OF SWITCH

NOTES

- To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
- Program controller to start up in phase 2 Green No Walk, 6 Green No Walk, 39 Phase Not On, and 40 Green No Walk.
- Program Phase 39 for No Startup Veh Call.
- Program phases 2, 6, and 40 for Min Recall.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
- The cabinet and controller are part of the #D06-17 Lumberton US 301 and SR 1997 (Fayetteville Road).

EQUIPMENT INFORMATION

Controller.....2070LX
Cabinet.....332 w/ Aux
Software.....Q-Free MAXTIME
Cabinet Mount.....Base
Output File Positions.....18 With Aux. Output File
Load Switches Used.....S1, S2, S4, S5, S7, S8, S9, S12, AUX S1, AUX S2, AUX S3, AUX S4
Phases Used.....1, 2, 3, 4, 5, 6, 6PED, 3PED
Overlap "1".....*
Overlap "2".....*
Overlap "3".....*
Overlap "4".....NOT USED
Overlap "5".....*
Overlap "7".....*

*See overlap programming detail on sheet 2

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5			S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6	
CMU CHANNEL NO.	1	2	13	3	4			14	5	6	15	7	8	16	9	10	17	11	12	18	
PHASE	1	2	2 PED	OL7	4			4 PED	5	6	6 PED	7	8	3 PED	OL1	OL2	OL5	OL3	OL4	SPARE	
SIGNAL HEAD NO.	11★	21.22	NU	63	41	42	43	NU	51★	61,62	P61, P62	NU	NU	P31, P32	11★	63★	31	32	51★	NU	NU
RED		128				101	101			134						A124	A111	A111			
YELLOW	★	129		★		102	102		★	135							A112	A112			
GREEN		130				103	103			136							A113	A113			
RED ARROW					101										A121				A114		
YELLOW ARROW					102										A122	A125			A115		
FLASHING YELLOW ARROW															A123	A126			A116		
GREEN ARROW	127			118	103	103			133								A113				
											119			110							
											121			112							

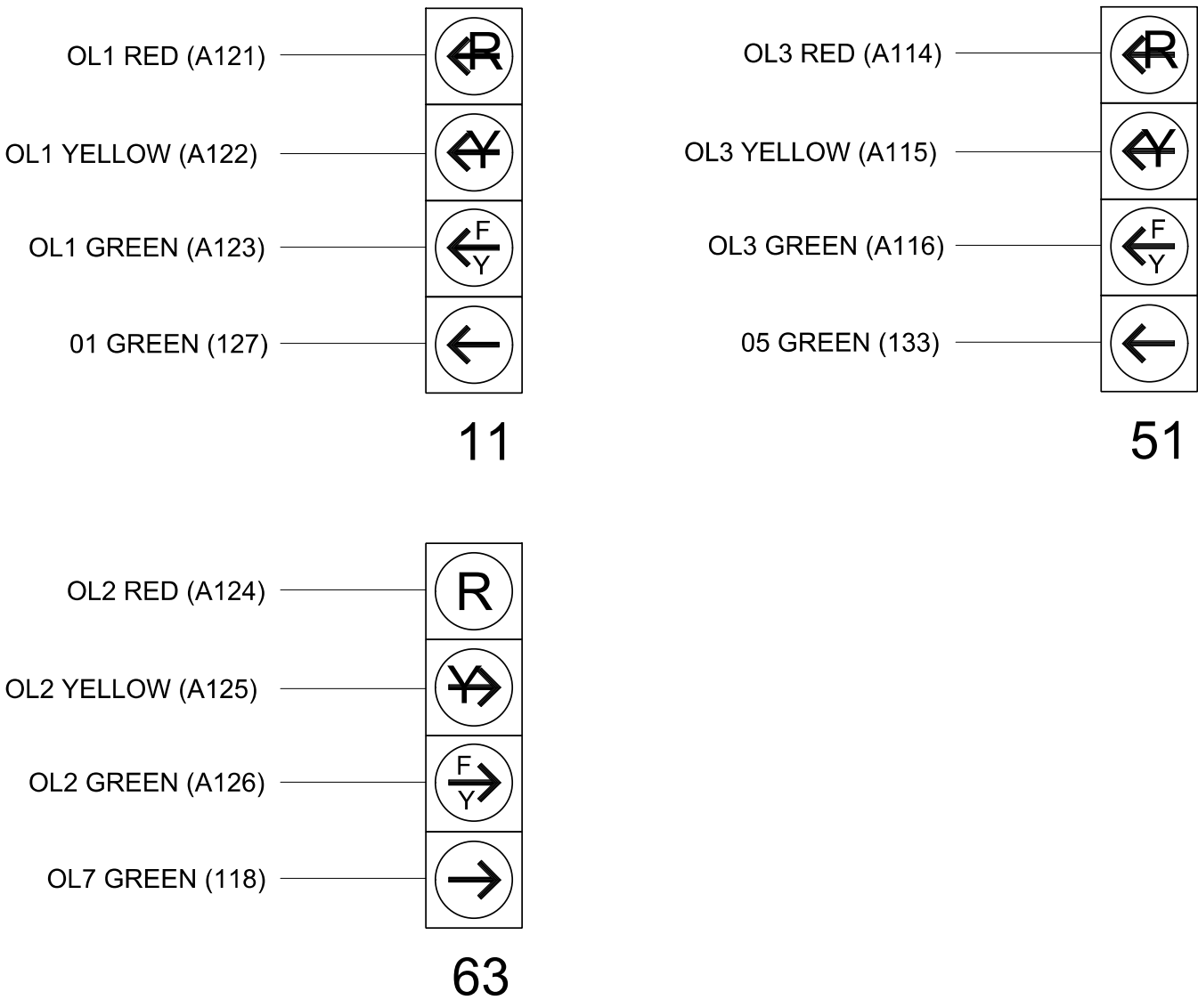
NU = Not Used

★ Denotes install load resistor. See load resistor installation detail this sheet.

★ See pictorial of head wiring in detail this sheet.

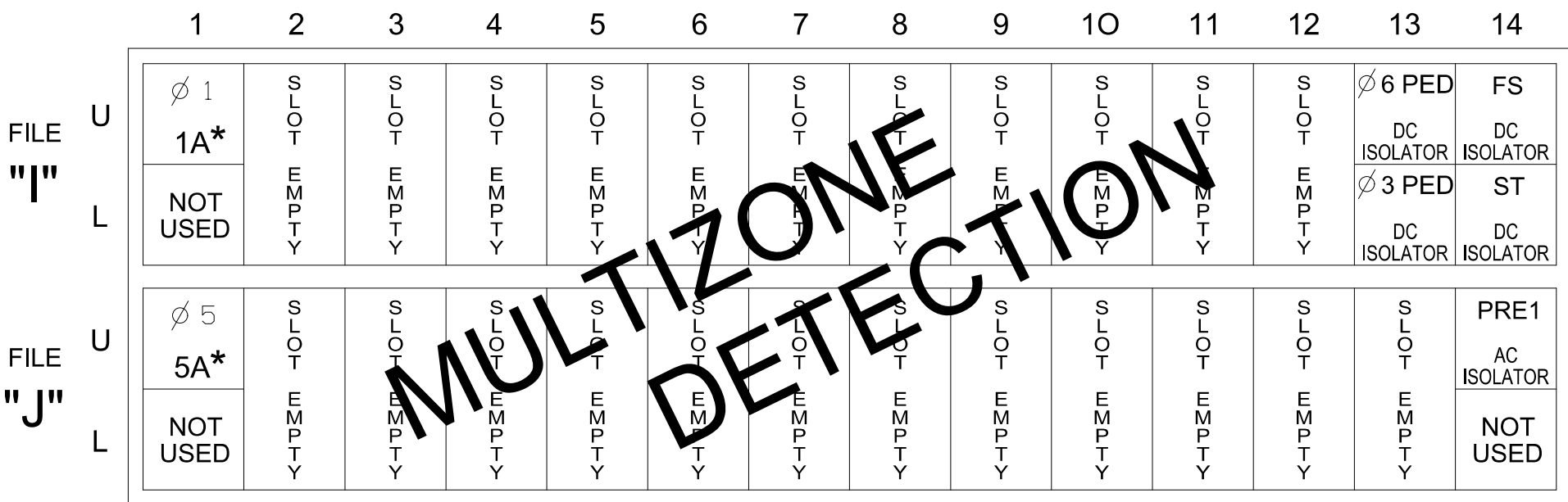
FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



INPUT FILE POSITION LAYOUT

(front view)



EX.: 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
ST = STOP TIME
PRE = PREEMPT

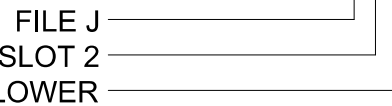
* Reflects the detector utilized in the "MAXTIME DETECTOR PROGRAMMING DETAIL FOR ALTERNATE PHASING LOOPS 1A & 5A" on Sheet 2.

INPUT FILE CONNECTION & PROGRAMMING CHART

PED PUSH BUTTONS	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE
P61,P62	TB8-7,9	I13U	68	34	6	PED 6
P31,P32	TB8-8,9	I13L	70	36	8	PED 3

NOTE:
INSTALL DC ISOLATOR IN INPUT FILE SLOT I13.

INPUT FILE POSITION LEGEND: J2L

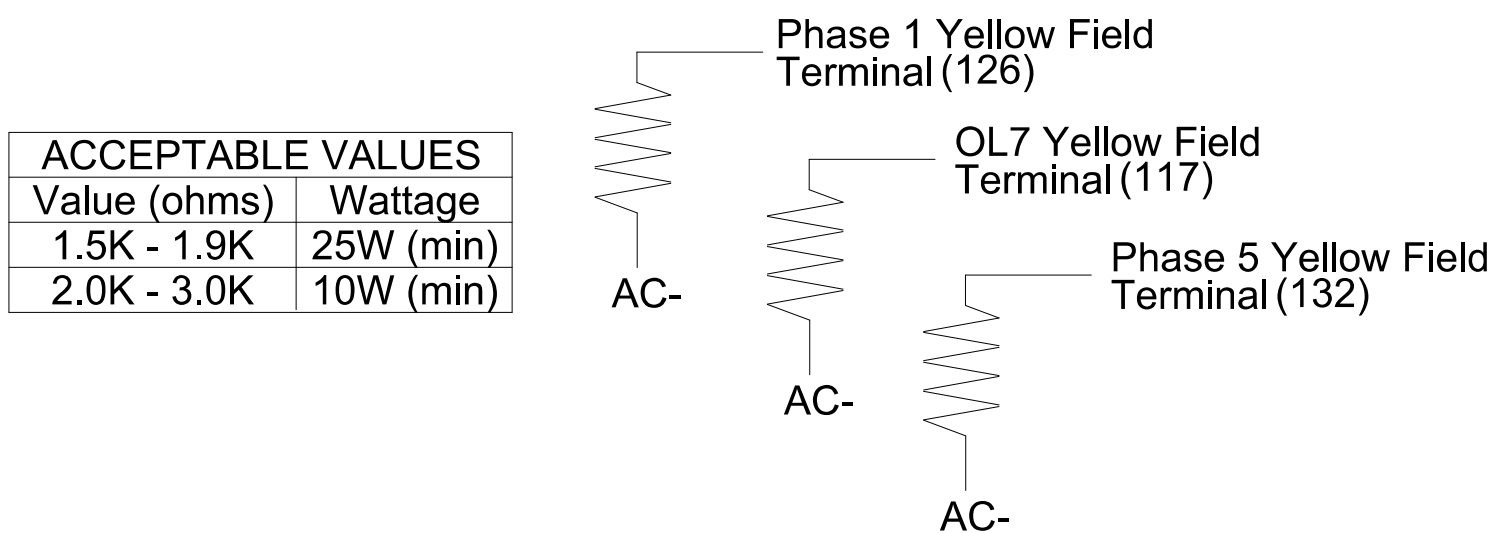


SPECIAL DETECTOR NOTE

Install a multizone microwave detection system for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer -approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)



ACCEPTABLE VALUES	
Value (ohms)	Wattage
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)

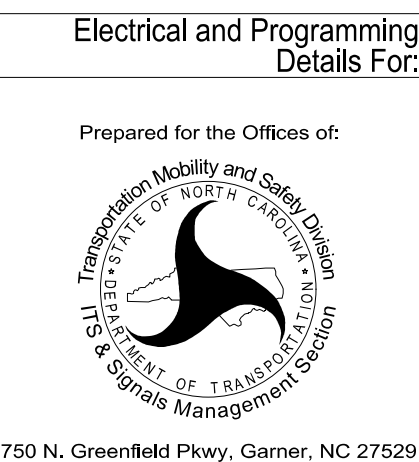
COUNTDOWN PEDESTRIAN SIGNAL OPERATION

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.



STV Engineers, Inc.
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(704) 372-1885
NC License Number F-0991

Final Design
Electrical Details - Sheet 1 of 4



NC 211 (N. Roberts Avenue)
at
Boomerang Drive / Restaurant Driveway

Division 6	Robeson County	Lumberton
PLAN DATE: Jan 2026	REVIEWED BY: B.J. Roth-Roffy	
PREPARED BY: J.C. Grimm	REVIEWED BY: T.M. Moody	
REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED



DocuSigned by
Trust Moody
1/27/2026
DATE
SIG. INVENTORY NO. 06-1387