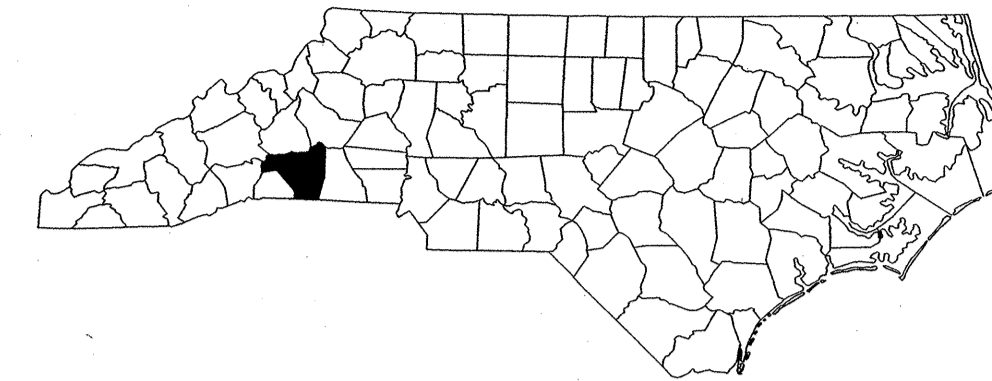


Project: R-2233AB

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

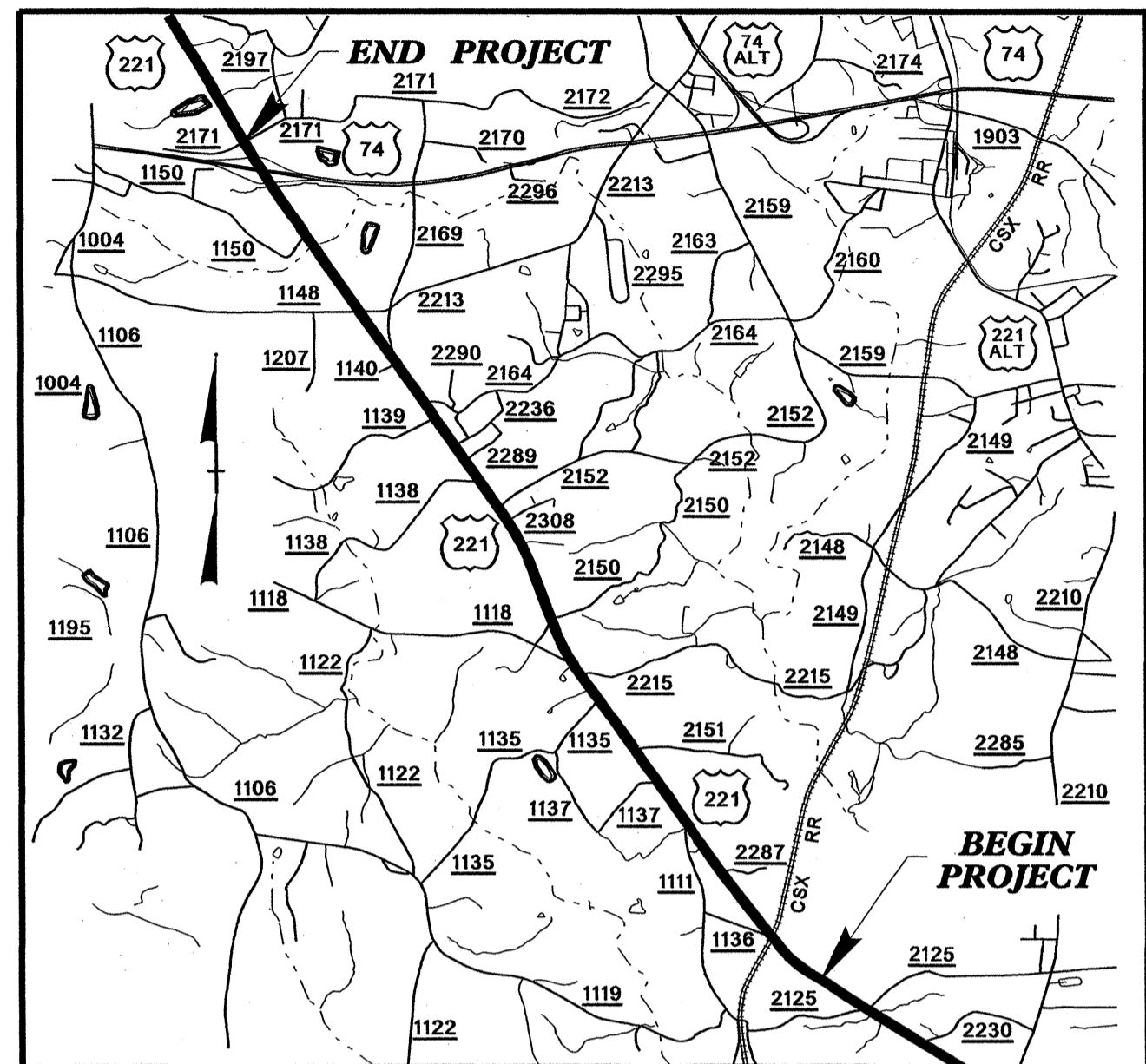
Project No.	Sheet No.
R-2233AB	Sig. 1



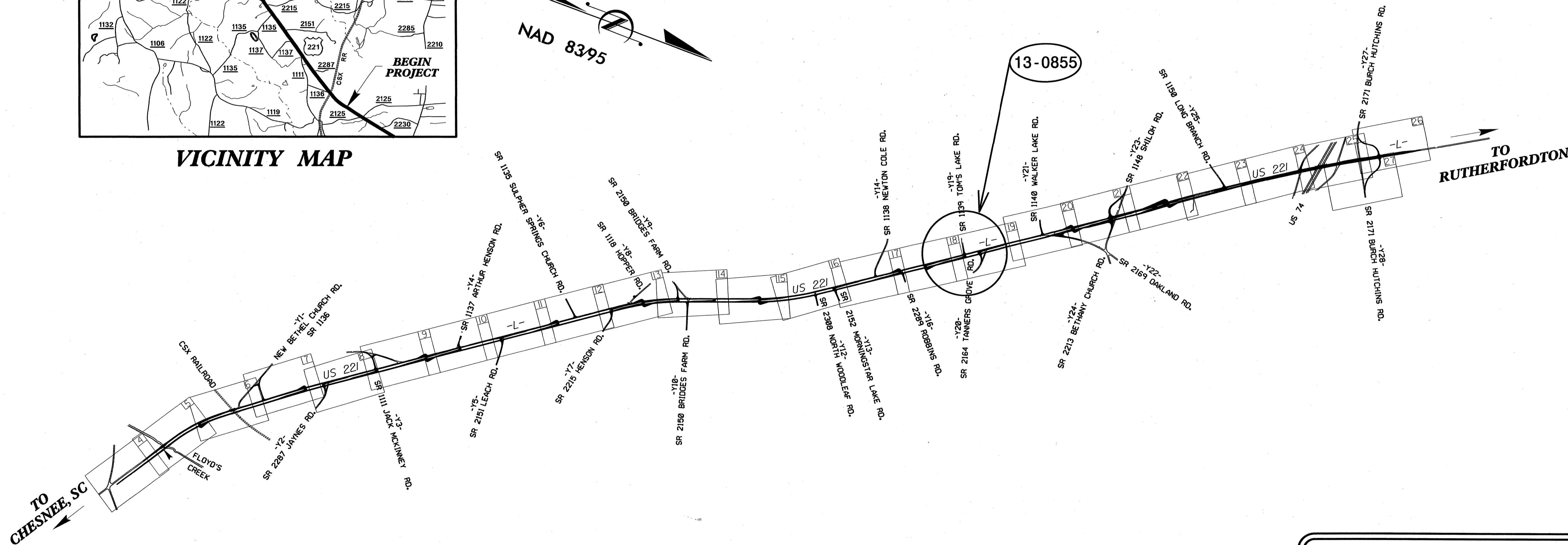
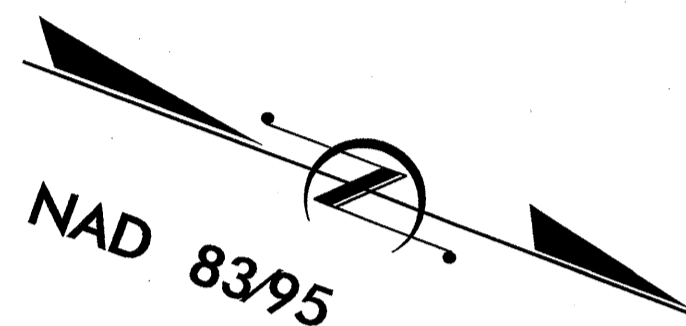
RUTHERFORD COUNTY

LOCATION: US 221 FROM SOUTH OF FLOYD'S CREEK TO NORTH OF US 74 BYPASS

TYPE OF WORK: TRAFFIC SIGNALS



VICINITY MAP



I:\AUG-2010\10456\Sigs\Workgroups\TIP Projects\R-2233AB\Signals\Design\Titlesheet\R2233AB.sig.tsh.dgn

Refer to "Roadway Standard Drawings NCDOT" dated July 2006 and "Standard Specifications for Roads and Structures" dated July 2006.

Sheet #	Reference #	Index of Plans	Location/Description
Sig. 1		Title Sheet	
Sig. 2	13-0855	US 221 at SR 1139 (Tom's Lake Road)	

INTELLIGENT TRANSPORTATION AND SIGNALS UNIT

Contacts:

Zachary M. Little, PE - Signals Project Engineer
John T. Rowe, PE - Signal Equipment Design Engineer
Gregory A. Fuller, PE - Intelligent Transportation Systems Engineer

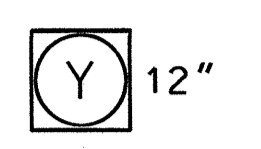
Prepared in the Office of:
DIVISION OF HIGHWAYS
TRANSPORTATION MOBILITY AND SAFETY
DIVISION

750 N. Greenfield Parkway, Garner, NC 27529

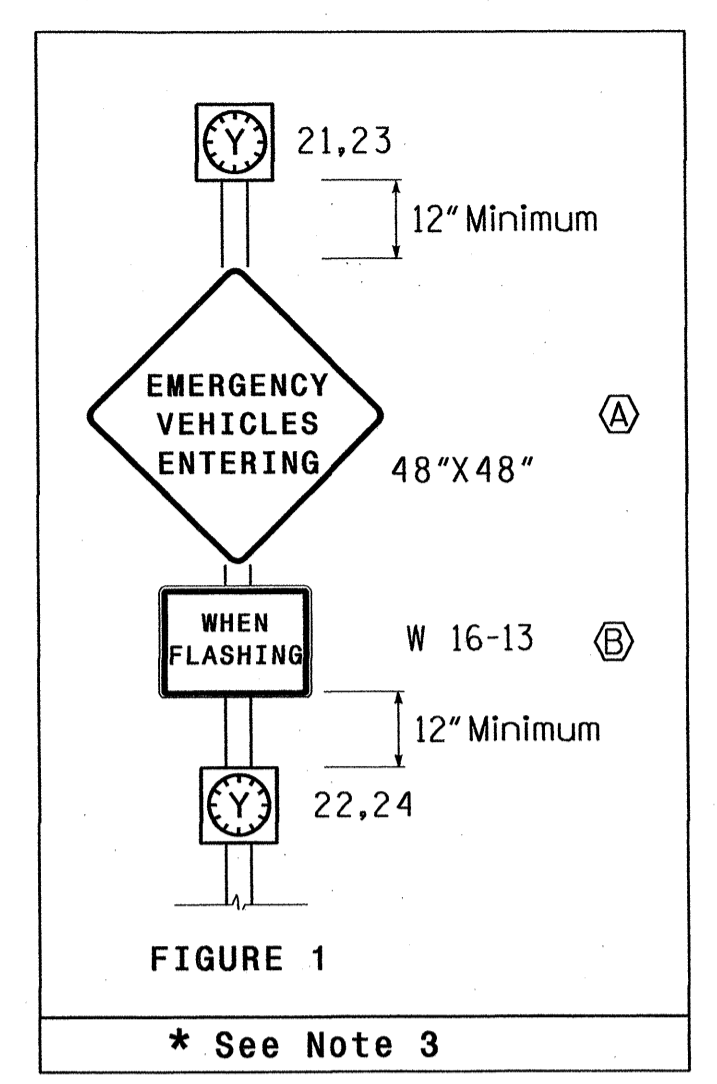
TABLE OF OPERATION		
SIGNAL FACE	INTERVAL	
	1	2
21, 23	ON	OFF
22, 24	OFF	ON

SIGNAL FACE I.D

All Heads L.E.D.



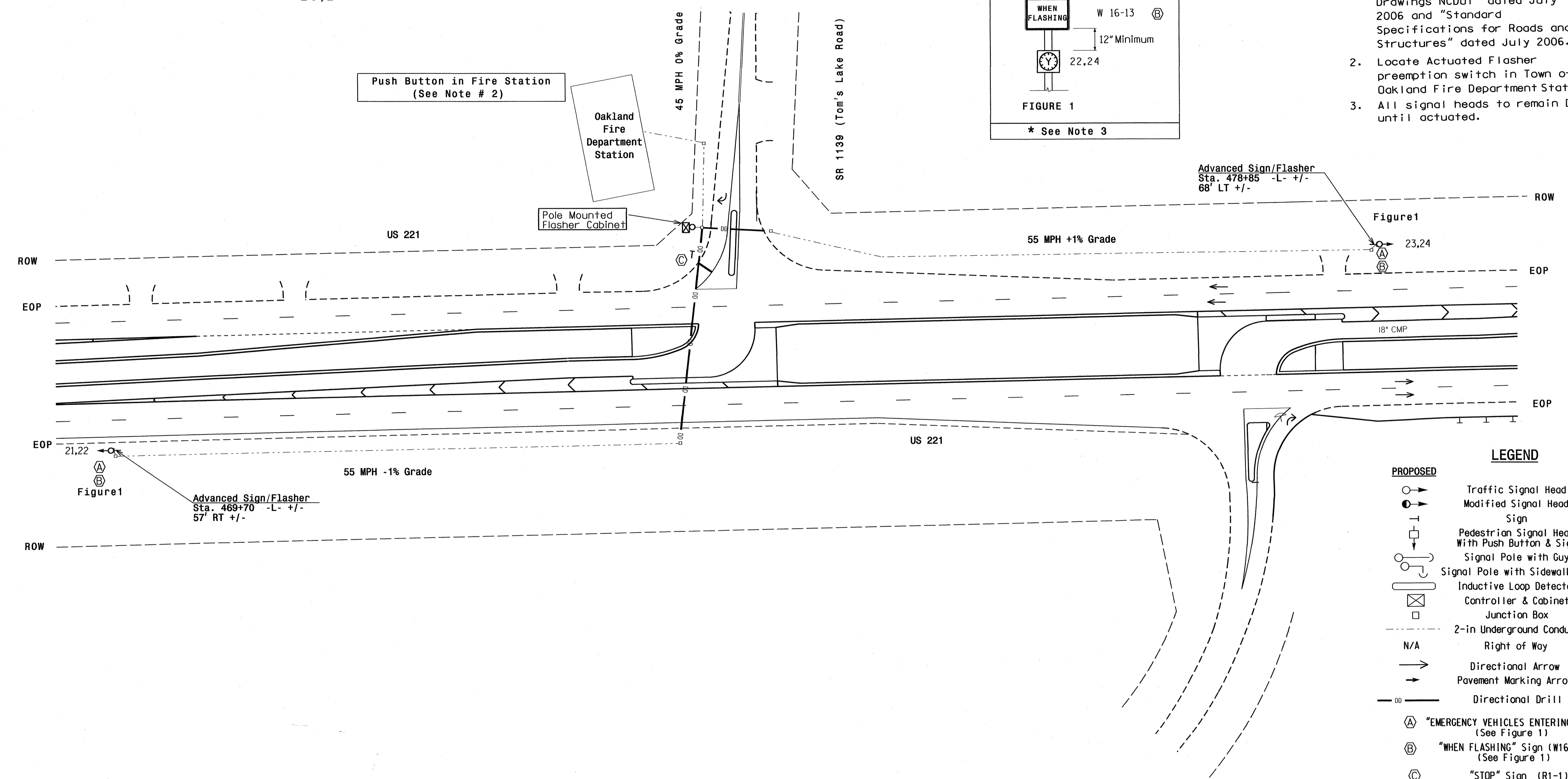
21,22
23,24



Emergency Vehicle Flasher

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated July 2006 and "Standard Specifications for Roads and Structures" dated July 2006.
2. Locate Actuated Flasher preemption switch in Town of Oakland Fire Department Station.
3. All signal heads to remain DARK until actuated.

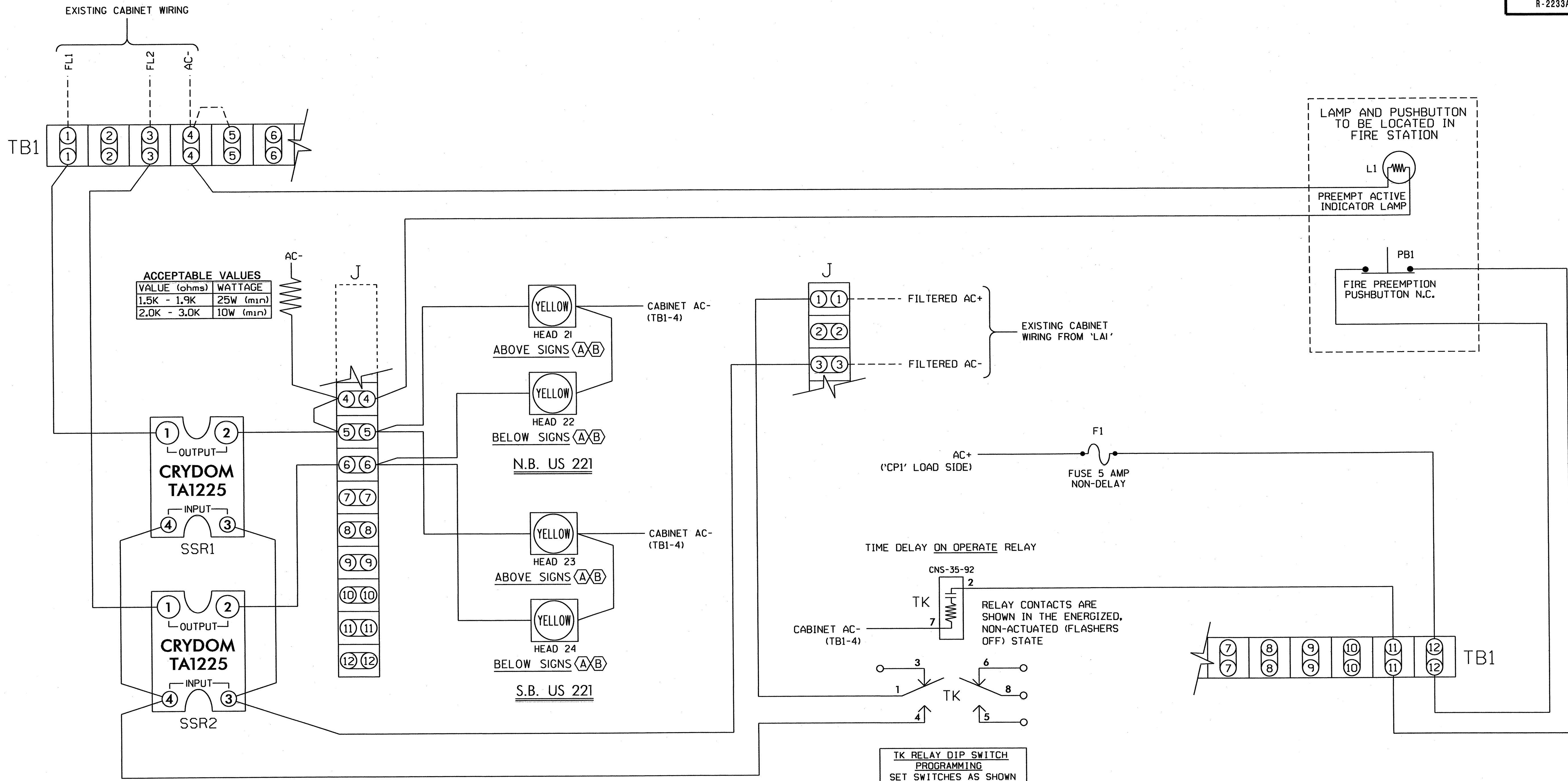


PROPOSED		EXISTING
○→	Traffic Signal Head	●→
●→	Modified Signal Head	N/A
└	Sign	└
○→	Pedestrian Signal Head	●→
○→	With Push Button & Sign	●→
○→	Signal Pole with Guy	●→
○→	Signal Pole with Sidewalk Guy	●→
⊠	Inductive Loop Detector	⊠
⊠	Controller & Cabinet	⊠
□	Junction Box	□
---	2-in Underground Conduit	---
N/A	Right of Way	---
→	Directional Arrow	→
→	Pavement Marking Arrow	→
---	Directional Drill	N/A
⊠	"EMERGENCY VEHICLES ENTERING" Sign (See Figure 1)	⊠
⊠	"WHEN FLASHING" Sign (W16-13) (See Figure 1)	⊠
⊠	"STOP" Sign (R1-1)	⊠

New Installation

	<h3>US 221</h3> <h3>at</h3> <h3>SR 1139 (Tom's Lake Road)</h3>									
	Division 13 Rutherford County Rutherfordton PLAN DATE: June 2010 REVIEWED BY: PREPARED BY: Jerry Yaravitz REVIEWED BY:	REVISIONS <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>INIT.</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>		NO.	DATE	INIT.	DATE			
NO.	DATE	INIT.	DATE							

10-AUG-2010 15:20
 S:\ITS&ITS\ITS Signal\mfr\grouper\TIP_P\Project\mfr-2233AB\Signal\mfr\Signal\Signal Design Section
 j.yaravitz

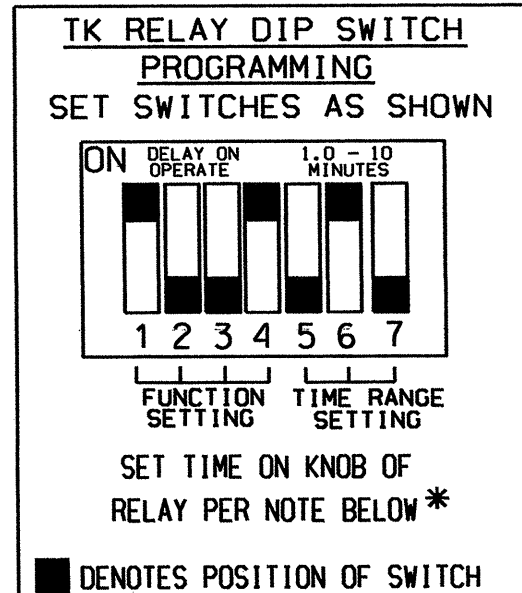


ACCEPTABLE VALUES

VALUE (ohms)	WATTAGE
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)

NOTES

- RELAYS 'SSR1' & 'SSR2' ARE SPST SOLID STATE RELAYS WITH AC INPUT, AC OUTPUT. (CRYDOM *TAI225 OR APPROVED EQUAL)
- TERMINAL BLOCK DESIGNATIONS SHOWN ARE FOR AN RGA, INC. DUAL CIRCUIT NEMA FLASHER CABINET, RGA NO. RGNCFR3 PER RGA DWG. NO. FC-NCF3-280889. (APPROVED EQUAL MAY BE USED)
- MOV'S AND TERMINAL BLOCKS ARE FURNISHED WITH THE FLASHER CABINET.
- 'L1' IS A FULL VOLTAGE TYPE PILOT LAMP WITH RED LENS. (SQUARE-D NO. 900IAL2 OR APPROVED EQUAL)
- 'PB1' IS A MOMENTARY ACTION PUSH BUTTON, SQUARE-D NO. 900IKRIU WITH NORMALLY CLOSED CONTACT BLOCK, SQUARE-D NO. 900IKA3. (APPROVED EQUAL MAY BE USED)
- PUSH BUTTON AND PILOT LAMP TO BE MOUNTED IN A SURFACE TYPE WALL BOX. (HOFFMAN PART NO. EIPB OR APPROVED EQUAL)
- RELAY 'TK' IS A MULTIFUNCTION TIME-DELAY RELAY DPDT WITH I20V AC COIL. (TYCO P&B NO. CNS-35-92 OR APPROVED EQUAL)



* TIME TO BE DETERMINED BY FIELD TRIALS

IMPORTANT!!

REMOVE BONDING JUMPER BETWEEN AC NEUTRAL AND EQUIPMENT GROUND IN FLASHER CABINET IF A SIMILAR JUMPER IS INSTALLED IN EITHER METER BASE OR DISCONNECT ENCLOSURE.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 13-0855
DESIGNED: JUNE 2010
SEALED: 8/10/10
REVISED: N/A

Emergency Actuated Flasher

	ELECTRICAL AND PROGRAMMING DETAILS FOR:		US 221 at SR 1139 (Tom's Lake Road)		SEAL
	Prepared In the Offices of:	Division 13	Rutherford County	Rutherfordton	
	PLAN DATE: July 2010	PREPARED BY: F.E. RUSS	REVIEWED BY: JWR		
	REVISIONS	INIT.	DATE		

750 N. Greenfield Pkwy, Garner, NC 27529

Signature: John T. Rowland, 8-11-10
DATE: 8-11-10
SIG. INVENTORY NO. 13-0855

11-AUG-2010 10:20 S:\TSS\51\TSS 51\gms\work\groups\stg\MonRus\actuated\flasher\130855_she.ele_201008xx.dgn