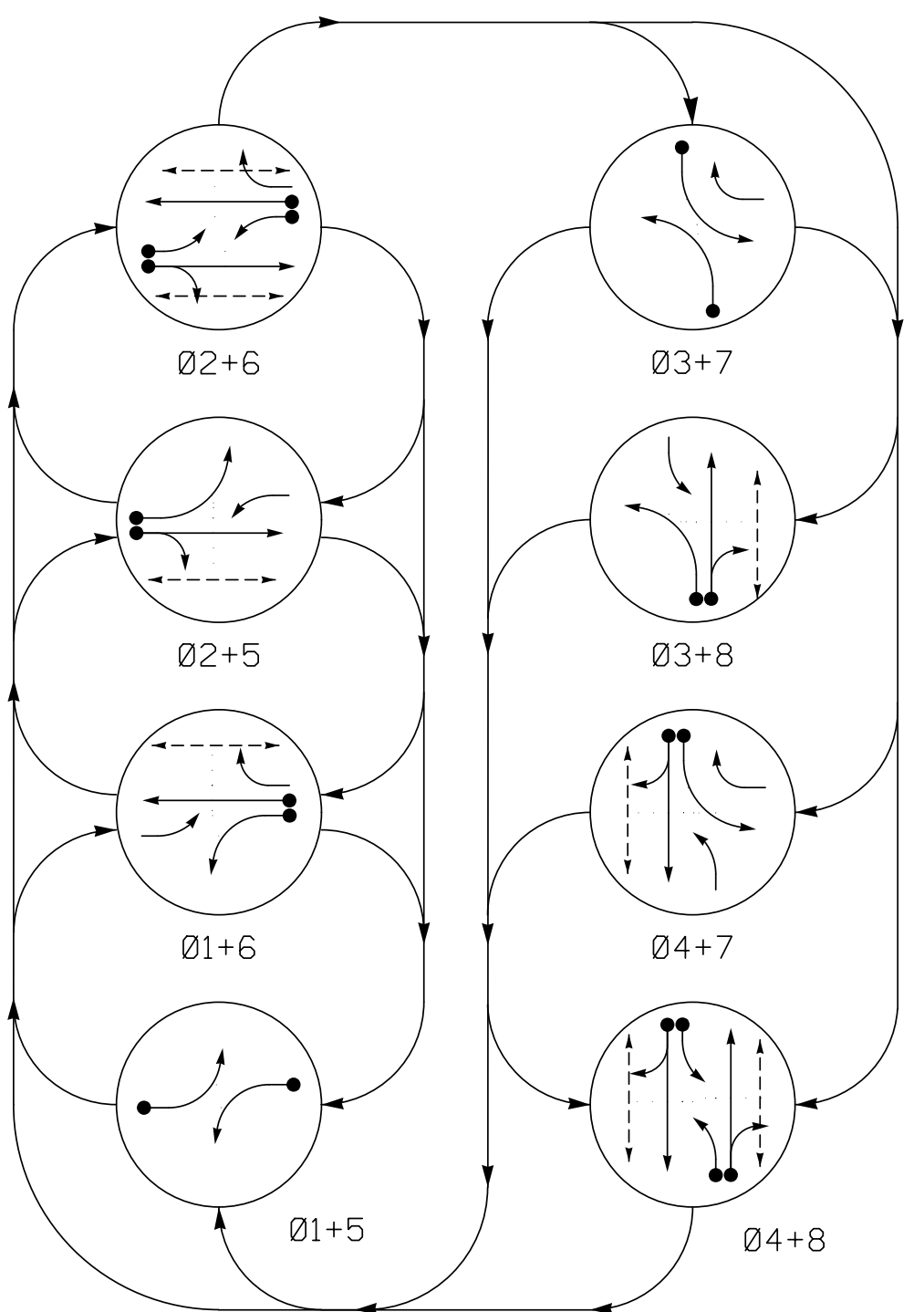


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- ←●→ DETECTED MOVEMENT
- ←○→ UNDETECTED MOVEMENT (OVERLAP)
- ←- - -→ UNSIGNALIZED MOVEMENT
- ←- - -> PEDESTRIAN MOVEMENT

EV PREEMPT PHASES
(Medium Priority)

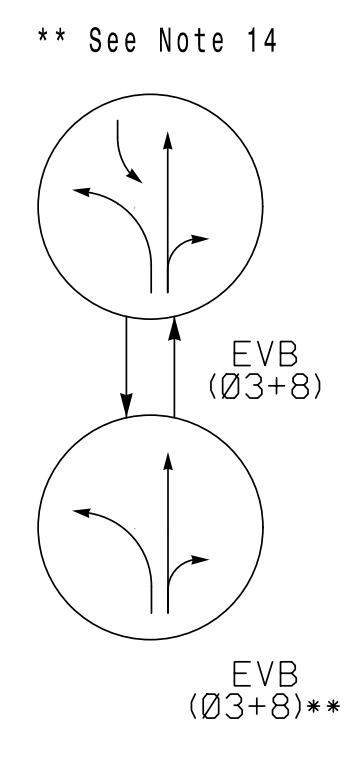
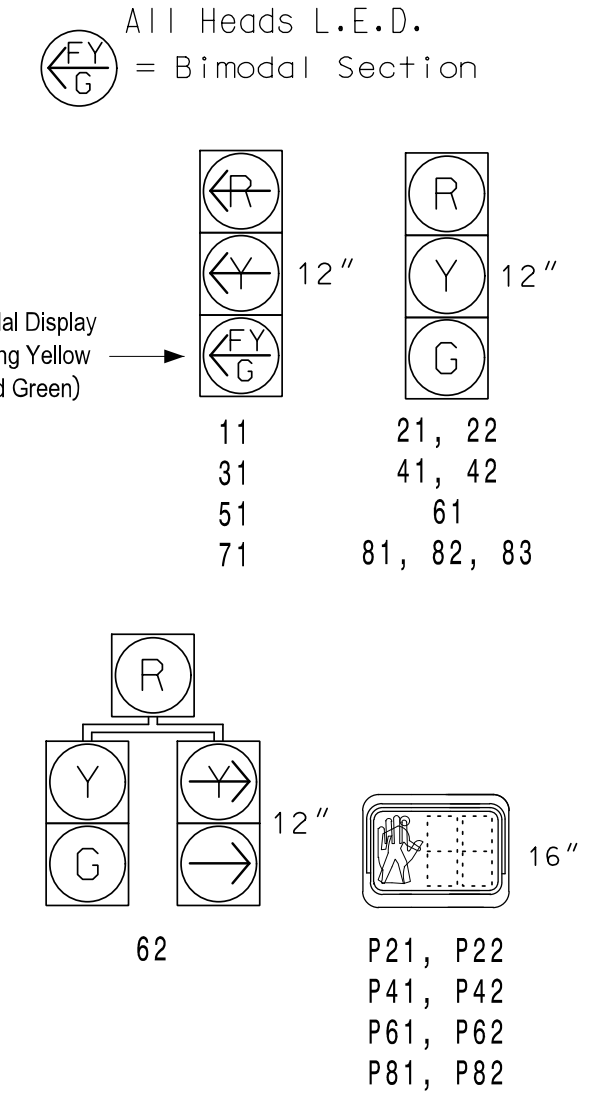


TABLE OF OPERATION

SIGNAL FACE	PHASE								EVB	FLASH	
	Ø1+5	Ø2+6	Ø3+7	Ø4+8	Ø1+6	Ø2+5	Ø3+8	Ø4+7			
11	←	←	←	←	←	←	←	←	←	Y	
21, 22	R	R	G	R	R	R	R	R	R	R	Y
31	←	←	←	←	←	←	←	←	←	Y	
41, 42	R	R	R	R	R	R	G	G	R	R	Y
51	←	←	←	←	←	←	←	←	←	Y	
61	R	G	R	G	R	R	R	R	R	R	Y
62	R	G	R	G	R	R	R	R	R	R	Y
71	←	←	←	←	←	←	←	←	←	Y	
81, 82, 83	←	←	←	←	←	←	←	←	←	G	
P21, P22	DW	DW	W	DW	DW	DW	DW	DW	DRK		
P41, P42	DW	DW	DW	DW	DW	W	W	DW	DRK		
P61, P62	DW	W	DW	W	DW	DW	DW	DW	DRK		
P81, P82	DW	DW	DW	DW	W	DW	W	DW	DRK		

SIGNAL FACE I.D.



2033 SOFTWARE W/ 2070 CONTROLLER LOOP & DETECTOR UNIT INSTALLATION CHART

LOOP NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW	EXISTING	NEMA PHASE	DELAY	CARRY (STRETCH)	DETECTOR PROGRAMMING										STATUS	
									ATTRIBUTES											
									1	2	3	4	5	6	7	8	9	10		
1A	6X40	2-4-2	0	X	-	1	15 SEC.	- SEC.	-	-	-	-	-	X	-	-	-	-	X	-
2A	6X6	5	250	X	-	2	- SEC.	- SEC.	-	-	-	-	-	X	-	-	-	-	X	-
2B	6X6	5	80	X	-	2	- SEC.	- SEC.	-	-	-	-	-	X	-	-	-	-	X	-
3A	6X40	2-4-2	0	X	-	3	15 SEC.	- SEC.	-	-	-	-	-	X	-	-	-	-	X	-
4A	6X60	2-4-2	0	X	-	4	10 SEC.	- SEC.	-	-	-	-	-	X	-	-	-	-	X	-
5A	6X40	2-4-2	0	X	-	5	15 SEC.	- SEC.	-	-	-	-	-	X	-	-	-	-	X	-
6A	6X6	5	250	X	-	6	- SEC.	- SEC.	-	-	-	-	-	X	-	-	-	-	X	-
6B	6X6	5	80	X	-	6	- SEC.	- SEC.	-	-	-	-	-	X	-	-	-	-	X	-
7A	6X60	2-4-2	0	X	-	7	15 SEC.	- SEC.	-	-	-	-	-	X	-	-	-	-	X	-
8A	6X40	2-4-2	0	X	-	8	10 SEC.	- SEC.	-	-	-	-	-	X	-	-	-	-	X	-
P21, P22	-	-	-	X	-	-	- SEC.	- SEC.	-	-	-	-	-	X	-	-	-	-	X	-
P41, P42	-	-	-	X	-	-	- SEC.	- SEC.	-	-	-	-	-	X	-	-	-	-	X	-
P61, P62	-	-	-	X	-	-	- SEC.	- SEC.	-	-	-	-	-	X	-	-	-	-	X	-
P81, P82	-	-	-	X	-	-	- SEC.	- SEC.	-	-	-	-	-	X	-	-	-	-	X	-

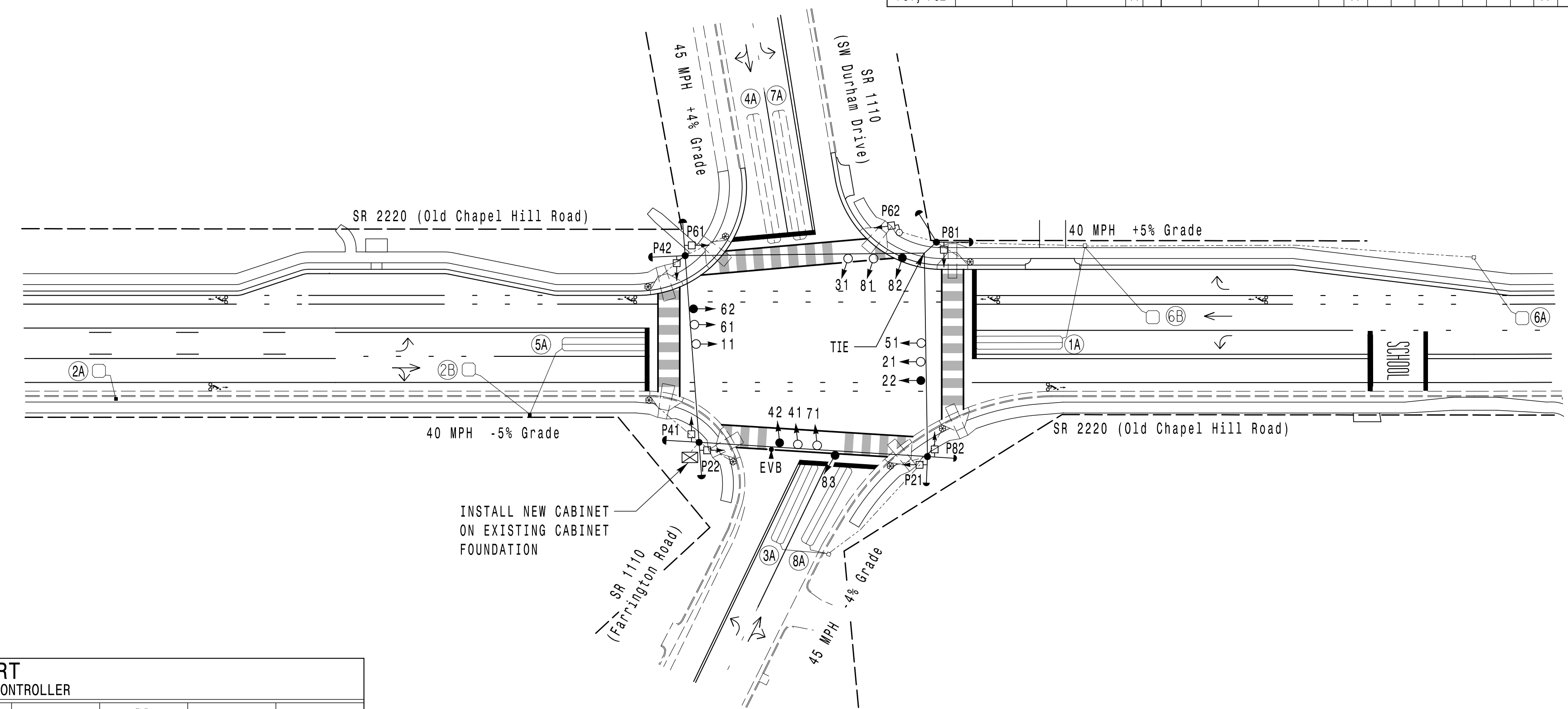
8 Phase Fully Actuated (Isolated)
NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012, "Standard Specifications for Roads and Structures" dated January 2012, and all applicable sections of the latest version of the generic Project Special Provisions. The PSP can be accessed at the following website: <https://connect.ncdot.gov/resources/safety/Pages/ITS-Design-Resources.aspx>
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 may be lagged.
- Reposition existing signal heads numbered 62 and 82.
- Set all detector units to presence mode.
- In the event of loop replacement, refer to the current ITS and Signal Design Manual and submit a Plan of Record to the Signal Design Section.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Program all timing information into phase banks 1, 2, and 3 unless otherwise noted.
- Set phase bank 3 maximum limit to 250 seconds for phases used.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- This intersection features an optical preemption system. Shown location of optical detector is conceptual only.
- If preempt phasing resides in the barrier being serviced then the opposing 4-section FYA will flash continuously. If preempt phasing requires crossing the barrier the 4-section FYA will display a red arrow.
- Upon completion of emergency vehicle preemption phase, controller returns to normal operation based on vehicle demand.
- Pedestrians pedestals are conceptual and shown for reference only. See sheet P1-P3 for pushbuttons locations details.

2033 SOFTWARE W/ 2070 CONTROLLER EV

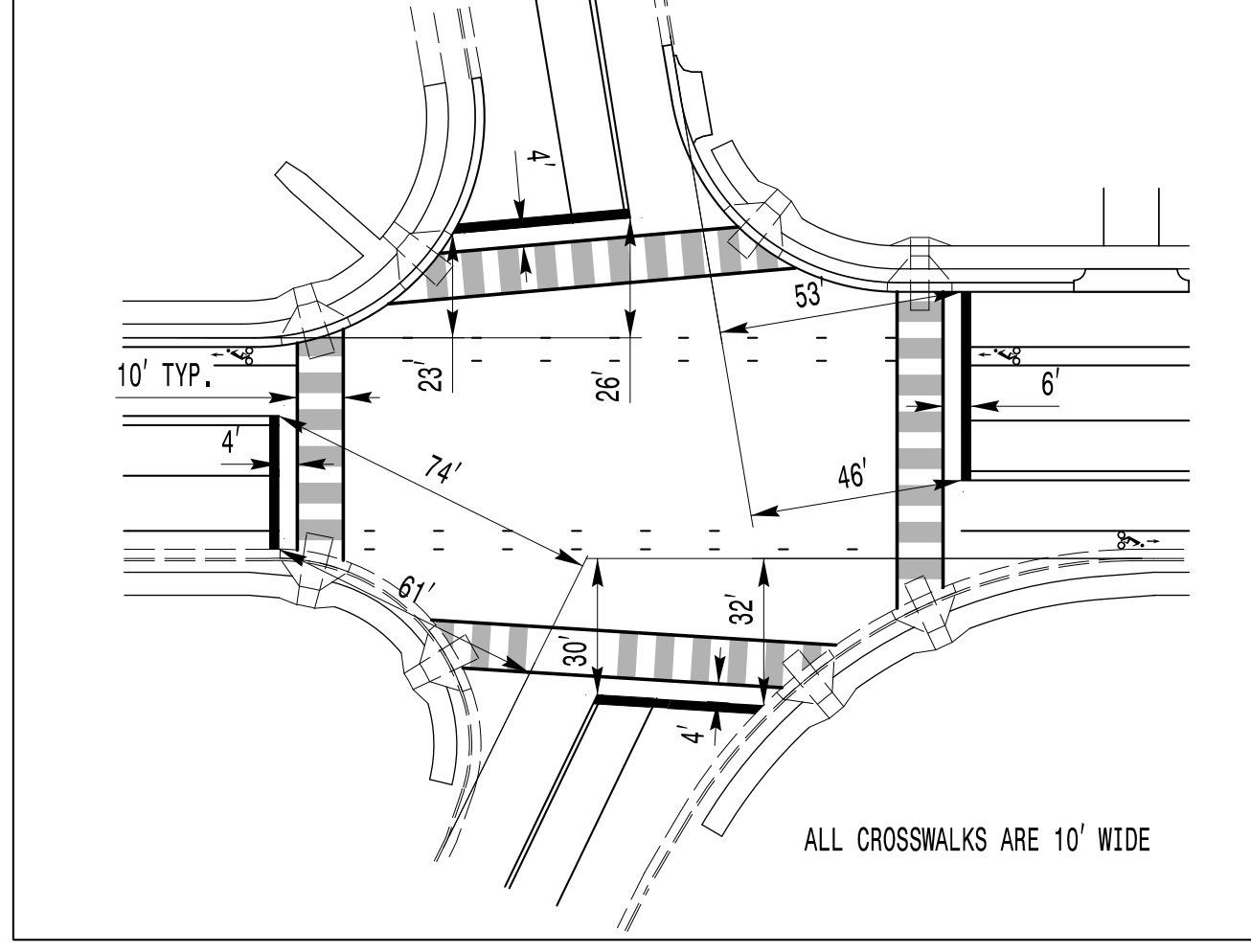
FUNCTION	EVB (PHASE 3+8) SECONDS
DELAY BEFORE PREEMPT	0
PED. CLEAR BEFORE PREEMPT	#
MIN. GREEN BEFORE PREEMPT	1
CLEARANCE TIME	7.0
PREEMPT EXTEND *	2.0

* Timing to be programmed on the Optical Detection Unit.
See Timing Chart this sheet



INSTALL NEW CABINET ON EXISTING CABINET FOUNDATION

STOPLINE AND CROSSWALK LOCATION DIAGRAM

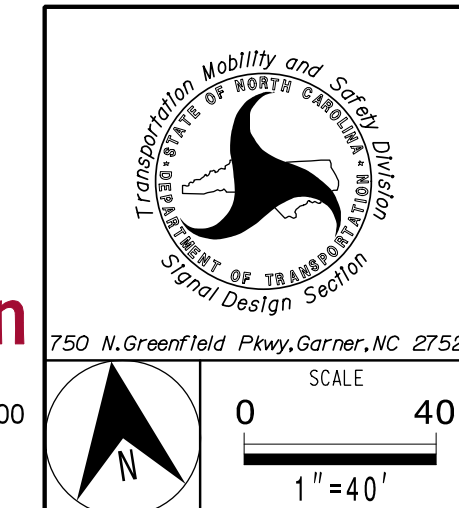


LEGEND

PROPOSED	EXISTING
○→ Traffic Signal Head	●→ N/A
○→ Modified Signal Head	○→ N/A
○→ Sign	○→ N/A
○→ Pedestrian Signal Head With Push Button & Sign	○→ N/A
○→ Type I Pushbutton Post	○→ N/A
○→ Type II Signal Pedestal	○→ N/A
○→ Optical Detector	○→ N/A
○→ Signal Pole with Guy	○→ N/A
○→ Signal Pole with Sidewalk Guy	○→ N/A
○→ Inductive Loop Detector	○→ N/A
○→ Controller & Cabinet	○→ N/A
○→ Junction Box	○→ N/A
○→ 2-in Underground Conduit	○→ N/A
○→ Right of Way	○→ N/A
○→ Directional Arrow	○→ N/A

NC Dept of Transportation
Division of Highways
Final Drawing Date: 6/30/2016
ITS & Signals Unit

Signal Upgrade



SR 220 (Old Chapel Hill Road) At SR 1110 (Farrington Road/SW Durham Drive)

Division 5 Durham County Durham

PLAN DATE: MAY 2016 REVIEWED BY: SL PHILLIPS

PREPARED BY: SP PENNINGTON RKA PROJ. NO:

REVISIONS: INIT. DATE

6/30/2016

SIG. INVENTORY NO. 05-1673

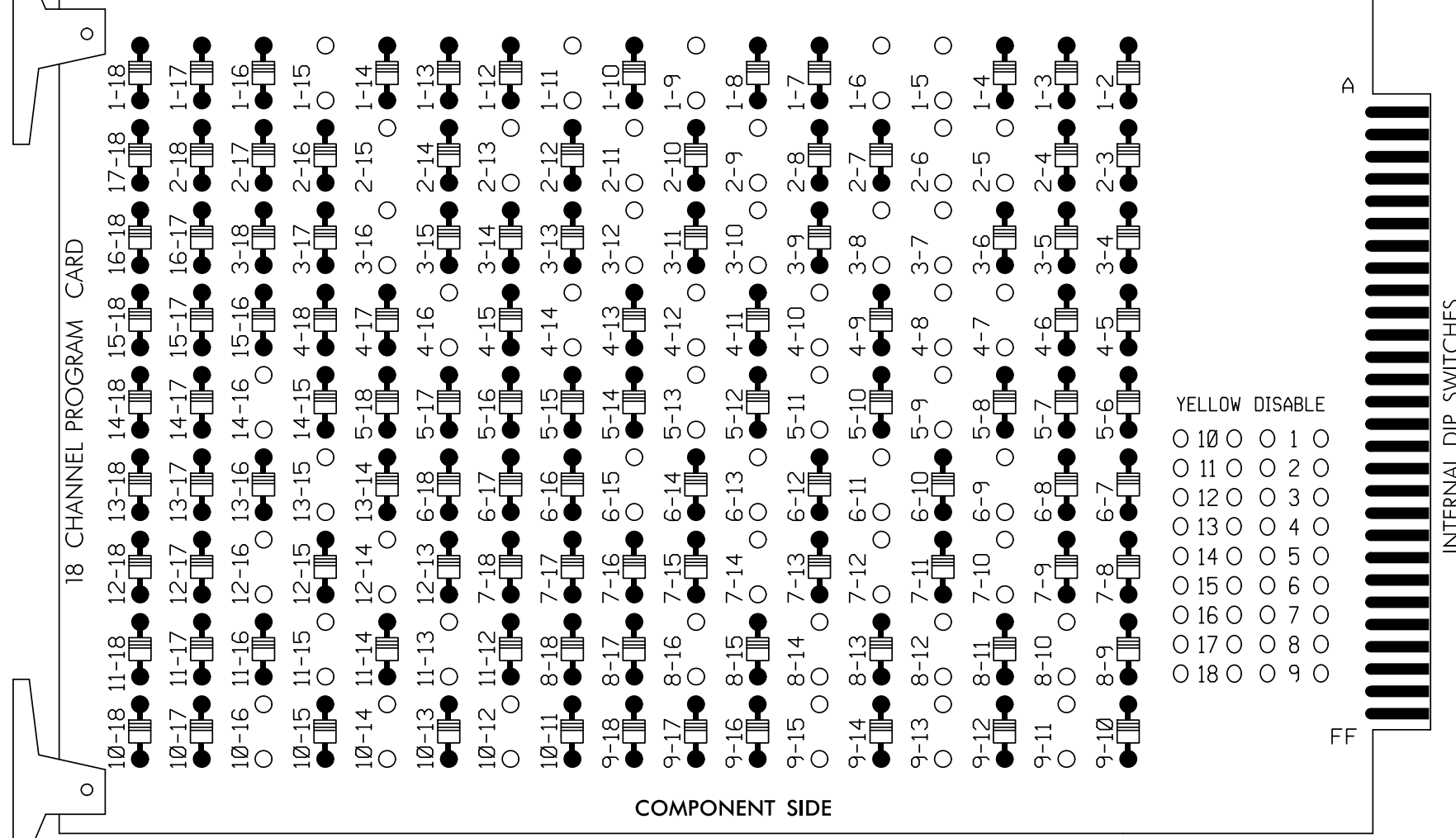
PLANS PREPARED IN THE OFFICE OF:
Kimley-Horn
NC License #F-0102
421 Fayetteville Street, Suite 600
Raleigh, NC 27601
(919) 677-2000

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EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

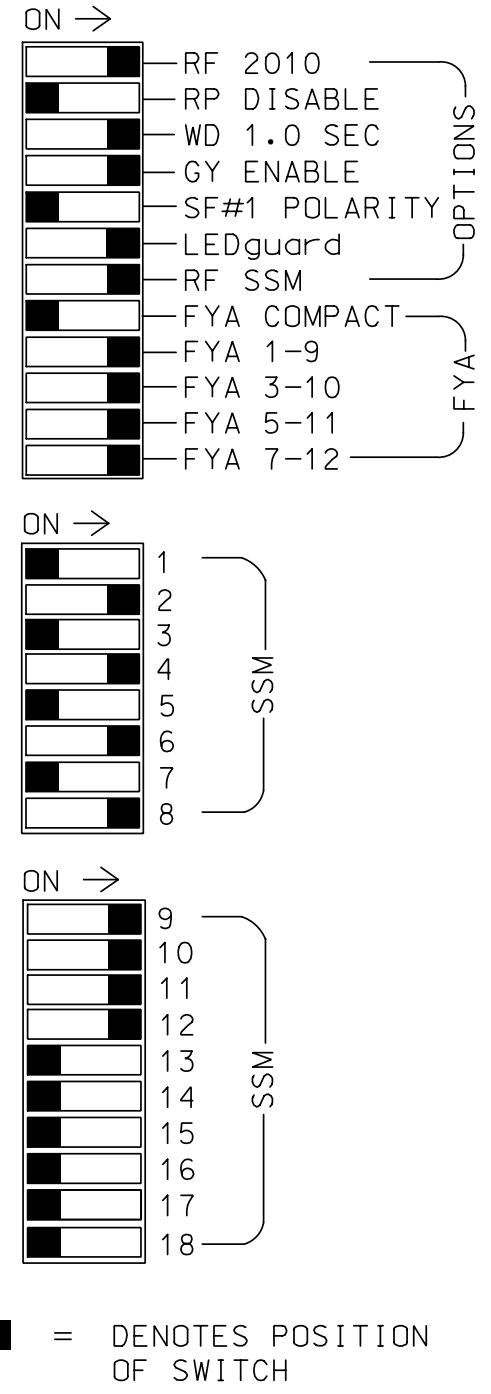
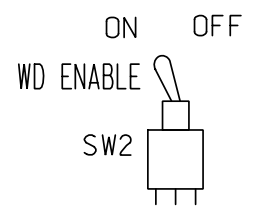
REMOVE DIODE JUMPERS 1-5,1-6,1-9,1-11,1-15,2-5,2-6,2-9,2-11,2-13,2-15,3-7,3-8,3-10, 3-12,3-16,4-7,4-8,4-10,4-12,4-14,4-16,5-9,5-11,5-13,6-9,6-11,6-13,6-15,7-10,7-12,7-14, 8-10,8-12,8-14,8-16,9-11,9-13,9-15,10-12,10-14,10-16,11-13,11-15,12-14,12-16,13-15 and 14-16



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 Red Enable is active at all times during normal operation.
- Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.



NOTES

- To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. verify that signal heads flash in accordance with the signal plans.
- Program controller to Start Up in phases 2 and 6 green.
- Set power-up flash time to 0 seconds within the controller programming. The conflict monitor will govern startup flash. Ensure STARTUP "RED START" is set to 0 seconds.
- Enable Simultaneous Gap-Out feature for all phases.
- Program all timing information into phase banks 1, 2, and 3 unless otherwise noted.
- Set phase bank 3 maximum limit to 250 seconds for phases used.
- Program phases 4 and 8 for Double Entry.
- Ensure start up flash phases are coordinated with flash program block assignments.
- Program Startup Ped Calls for phases 2, 4, 6, and 8.
- Set the Red Revert interval on the controller to 1 second.

EQUIPMENT INFORMATION

CONTROLLER.....2070E
 CABINET.....332 W/ AUX
 SOFTWARE.....McCAIN 2033
 CABINET MOUNT.....BASE
 OUTPUT FILE POSITIONS...18 WITH AUX FILE
 LOAD SWITCHES USED.....S1,S2,S3,S4,S5,S6,S7,S8,S9,S10,S11, S12,AUX S1,AUXS2,AUXS4,AUX S5
 PHASES USED.....1,2,2PED,3,4,4PED,5,6,6PED,7,8,8PED
 OVERLAP 1.....*
 OVERLAP 2.....*
 OVERLAP 3.....*
 OVERLAP 4.....*
 * See FYA PPLT Programming Detail on sheet 2

PROJECT REFERENCE NO.	SHEET NO.
EB-4707B	SIG. 2

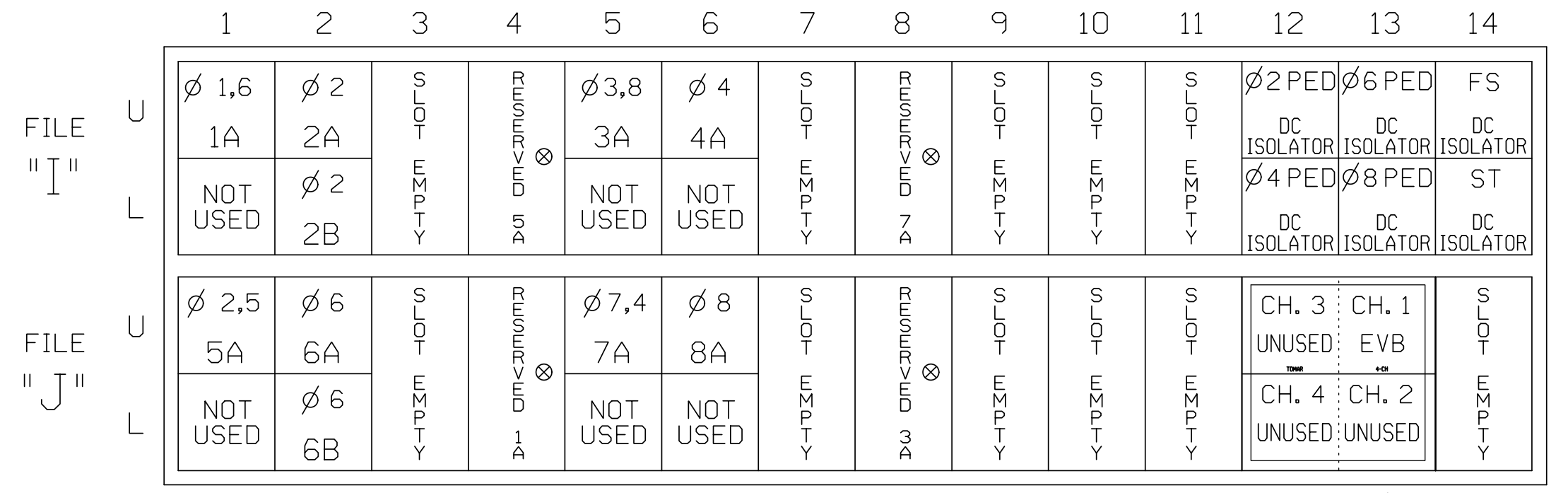
SIGNAL HEAD HOOK-UP CHART

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	3	4	4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE	
SIGNAL HEAD NO.	11	21,22	P21, P22	31	41,42	P41, P42	51	61,62	P61, P62	62	71	81,82,83	P81, P82	11	31	NU	51	71	NU
RED	128			101				134				107							
YELLOW	*	129		*	102		*	135				108							
GREEN		130			103			136				109							
RED ARROW													A121	A124		A114	A101		
YELLOW ARROW											123		A122	A125		A115	A102		
FLASHING YELLOW ARROW													A123	A126		A116	A103		
GREEN ARROW	127			118			133			124	124								
Hand icon				113			104			119			110						
Walking person icon				115			106			121			112						

NU = Not Used
 * Denotes install load resistor. See load resistor installation detail this sheet.
 * See pictorial of head wiring in detail below.

INPUT FILE POSITION LAYOUT

(front view)



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

4 CHANNEL TOMAR OSP CARD
 INSERT CARD INTO SLOT J13

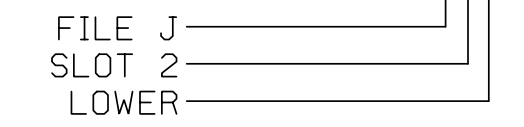
FS = FLASH SENSE
 ST = STOP TIME
 EV = EMERG. VEH. PREEMPT

INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	DETECTOR NO.	PIN NO.	ATTRIBUTES	NEMA PHASE
1A	TB2-1,2	I1U	14	56	5 7	1
			10	56	5 7	6
2A	TB2-5,6	I2U	1	39	5 7	2
			5	43	5 7	2
3A	TB4-5,6	I5U	16	58	5 7	3
			12	58	5 7	8
4A	TB4-9,10	I6U	3	41	5 7	4
			13	55	5 7	5
5A	TB3-1,2	J1U	9	55	5 7	2
			2	40	5 7	6
6B	TB3-7,8	J2L	6	44	5 7	6
			15	57	5 7	7
7A	TB5-5,6	J5U	11	57	5 7	4
			4	42	5 7	8
8A	TB5-9,10	J6U	25	67	2	2 PED
			27	69	2	4 PED
P21, P22	TB8-4,6	I12U	26	68	2	6 PED
			28	70	2	8 PED

NOTE:
 INSTALL DC ISOLATORS IN INPUT FILE SLOTS 112 AND 113.

INPUT FILE POSITION LEGEND: J2L



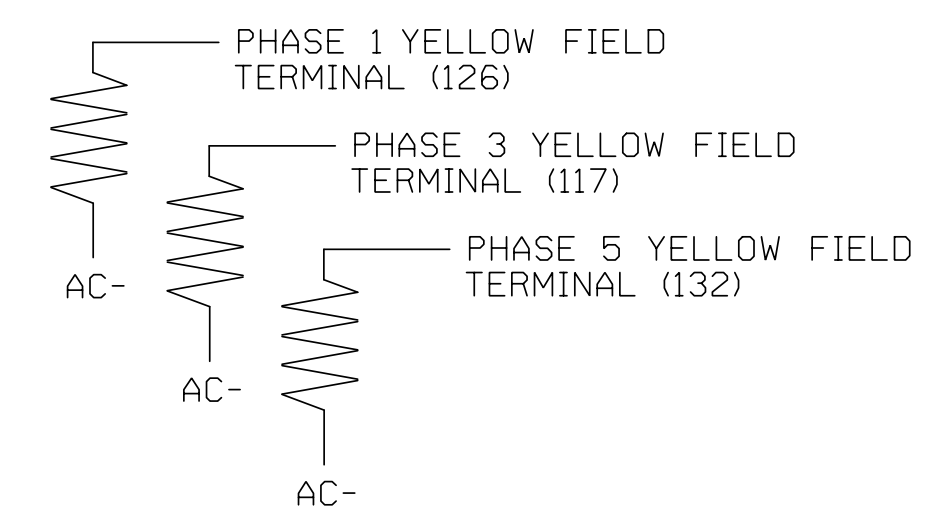
DETECTOR ATTRIBUTES LEGEND:

- 1-FULL TIME DELAY
- 2-PED CALL
- 3-RESERVED
- 4-COUNTING
- 5-EXTENSION
- 6-TYPE 3
- 7-CALLING
- 8-ALTERNATE

LOAD RESISTOR INSTALLATION DETAIL

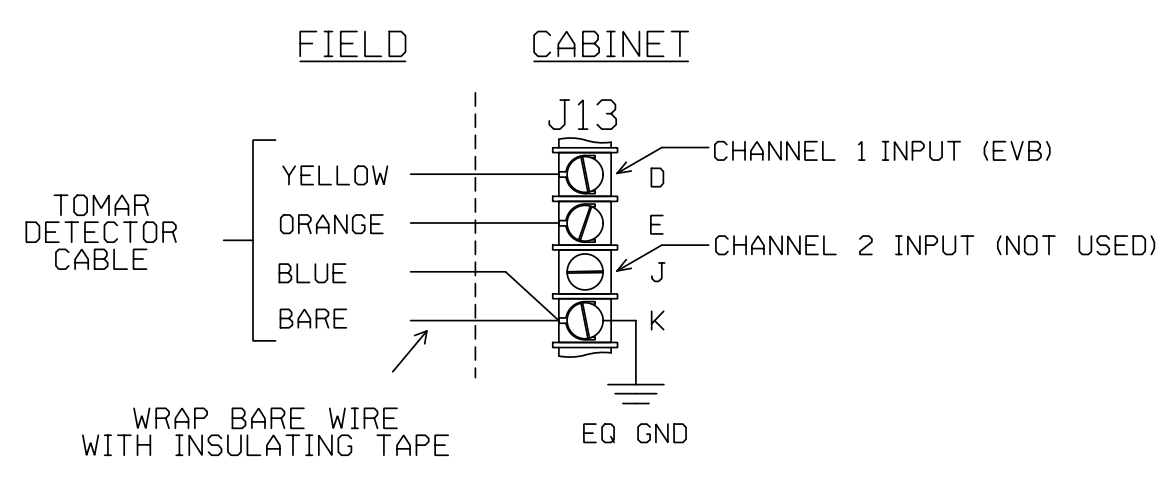
(install resistors as shown below)

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

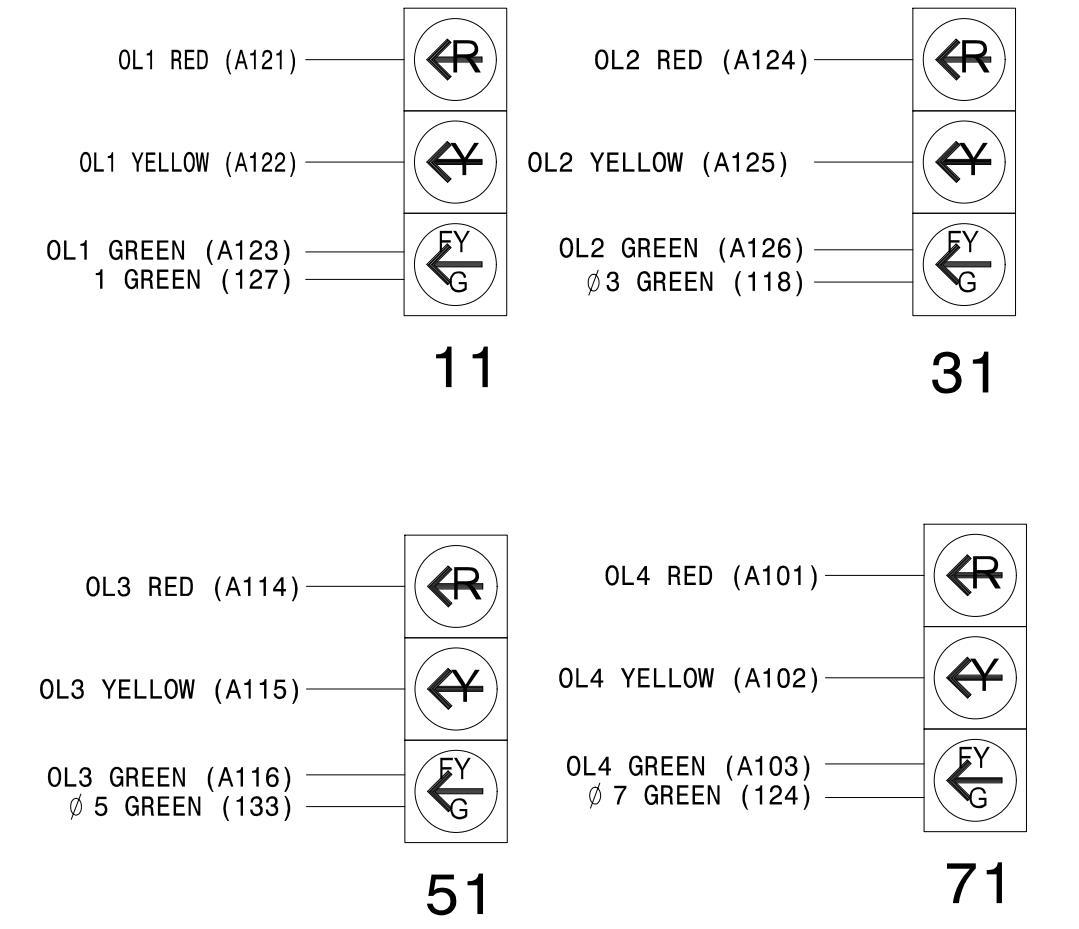


TYPICAL TOMAR FIELD WIRE DETAIL

(input file, rear view)



FYA PPLT SIGNAL WIRING DETAIL



SIGNAL SYSTEM DATA:	
Drop	13
Area	3
Area Address	5
Comm Channel	ISO

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 05-1673
 DESIGNED: MAY 2016
 SEALED: 06/30/2016
 REVISED: N/A

NC Dept of Transportation
 Division of Highways
 Prepared By: SP PENNINGTON
 Date: 6/30/2016
 Signature: [Signature]
 ITS & Signals Unit

Signal Upgrade Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ELECTRICAL AND PROGRAMMING DETAILS FOR: SR 2220 (Old Chapel Hill Road) at SR 1110 (Farrington Road/SW Durham Drive)

Division 5 Durham County Durham

PLAN DATE: MAY 2016 REVIEWED BY: SL PHILLIPS

PREPARED BY: SP PENNINGTON RFA PROJ. NO:

REVISIONS: INIT. DATE

6/30/2016

SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 032607

SIGNATURE: [Signature] DATE: 6/30/2016

SIG. INVENTORY NO. 05-1673

PLANS PREPARED IN THE OFFICE OF:
Kimley Horn
 NC License #F-0102
 421 Fayetteville Street, Suite 600
 Raleigh, NC 27601
 (919) 617-2000

6/29/2016 4:15:18 PM susan.pennington www.kimley-horn.com EB-4707B Form: BNF\cawr\cawr\Signal\es64 - Signal_Design\05-1673_2016e1.dgn

FYA PPLT PROGRAMMING

- Program Flashing Yellow Arrow phases as follows:
Main Menu - 1) PHASE - 2) PHASE FUNCTIONS PAGE TWO
PPLT FYA = PHASE 1,3,5,7
- Assign output pin for Flashing Yellow Arrow as follows:
Main Menu - 6) OUTPUTS - F) FYA PPLT
Phase 1 = 99
Phase 3 = 96
Phase 5 = 90
Phase 7 = 87
- Redirect RED and YELLOW outputs for the left turn phases as follows:
Main Menu - 6) OUTPUTS - 8) REDIRECT PHASE
Phase 1 RED = 97, Phase 1 YELLOW = 98
Phase 3 RED = 94, Phase 3 YELLOW = 95
Phase 5 RED = 88, Phase 5 YELLOW = 89
Phase 7 RED = 85, Phase 7 YELLOW = 86

PEDESTRIAN LOADSWITCH ASSIGNMENTS

Program the pedestrian loadswitch output assignments as follows:

- Main Menu - 6) OUTPUTS - 7) PEDS
- PED 2P = 2
 - PED 4P = 4
 - PED 6P = 6
 - PED 8P = 8

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.

EMERGENCY VEHICLE PREEMPTION PROGRAMMING

- Program EVB preempt as follows:
Main Menu - 2) PREEMPT - 4) EMERGENCY VEHICLE
EVB Clear = 7
EVB Clearance Phases = 3,8
- Program general preemption parameters as follows:
Main Menu - 2) PREEMPT - 6) MISC PREEMPTION PARAMETERS
Min Time Before PE ForceOff = 1
- Ped Clear Before Preempt is a pedestrian timing parameter, and is programmed as follows:
Main Menu - 1) PHASE - 5) PEDESTRIAN TIMING
PHASE 2 MIN FDW = 14
PHASE 4 MIN FDW = 8
PHASE 6 MIN FDW = 16
PHASE 8 MIN FDW = 11

Program extend time on optical detector units for 2.0 sec for EVB.

FLASHER CIRCUIT MODIFICATION DETAIL

IN ORDER TO INSURE THAT SIGNALS FLASH CONCURRENTLY ON THE SAME APPROACH, MAKE THE FOLLOWING FLASHER CIRCUIT CHANGES:

- ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-4 AND TERMINATE ON T2-2.
- ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-5 AND TERMINATE ON T2-3.
- REMOVE FLASHER UNIT 2.

THE CHANGES LISTED ABOVE TIES ALL PHASES AND OVERLAPS TO FLASHER UNIT 1.

MIN WALK DURING PREEMPTION PROGRAMMING

To disable MIN WALK pedestrian timing during preemption, program the controller as follows:

- Main Menu - 9) UTILITIES - 5) CONFIGURATION
EXTRA TWO = 3

SPECIAL NOTES EV PREEMPT PROGRAMMING


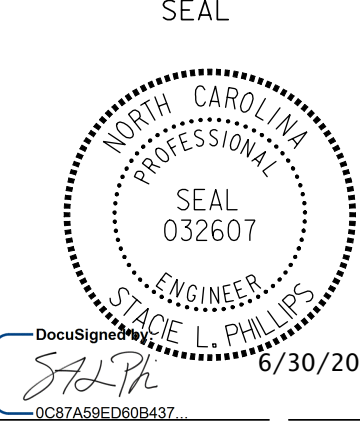
Setting 'FYA DURING PREEMPT' to 'Y' eliminates yellow trap when transitioning to preempt from adjacent through phase.
Main Menu - 9) UTILITIES - 9) MISC
FYA DURING PREEMPT (Y/N) = Y

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 05-1673
DESIGNED: MAY 2016
SEALED: 06/30/2016
REVISED: N/A

NC Dept of Transportation
Division of Highways
Sealing Date: 6/30/2016
18064606274444
ITS & Signals Unit

Signal Upgrade Sheet 2 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

 <p>PLANS PREPARED IN THE OFFICE OF: Kimley»Horn NC License #F-0102 421 Fayetteville Street, Suite 600 Raleigh, NC 27601 (919) 677-2000</p>	<p>ELECTRICAL AND PROGRAMMING DETAILS FOR:</p> <p>SR 2220 (Old Chapel Hill Road) at SR 1110 (Farrington Road/SW Durham Drive)</p> <p>Division 5 Durham County Durham</p>		 <p>SEAL 032607 STACIE L. PHILLIPS ENGINEER 6/30/2016</p>					
	<p>PLAN DATE: MAY 2016</p> <p>PREPARED BY: SP PENNINGTON</p>	<p>REVIEWED BY: SL PHILLIPS</p> <p>RMA PROJ. NO:</p>		<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DATE	DESCRIPTION	
NO.	DATE	DESCRIPTION						

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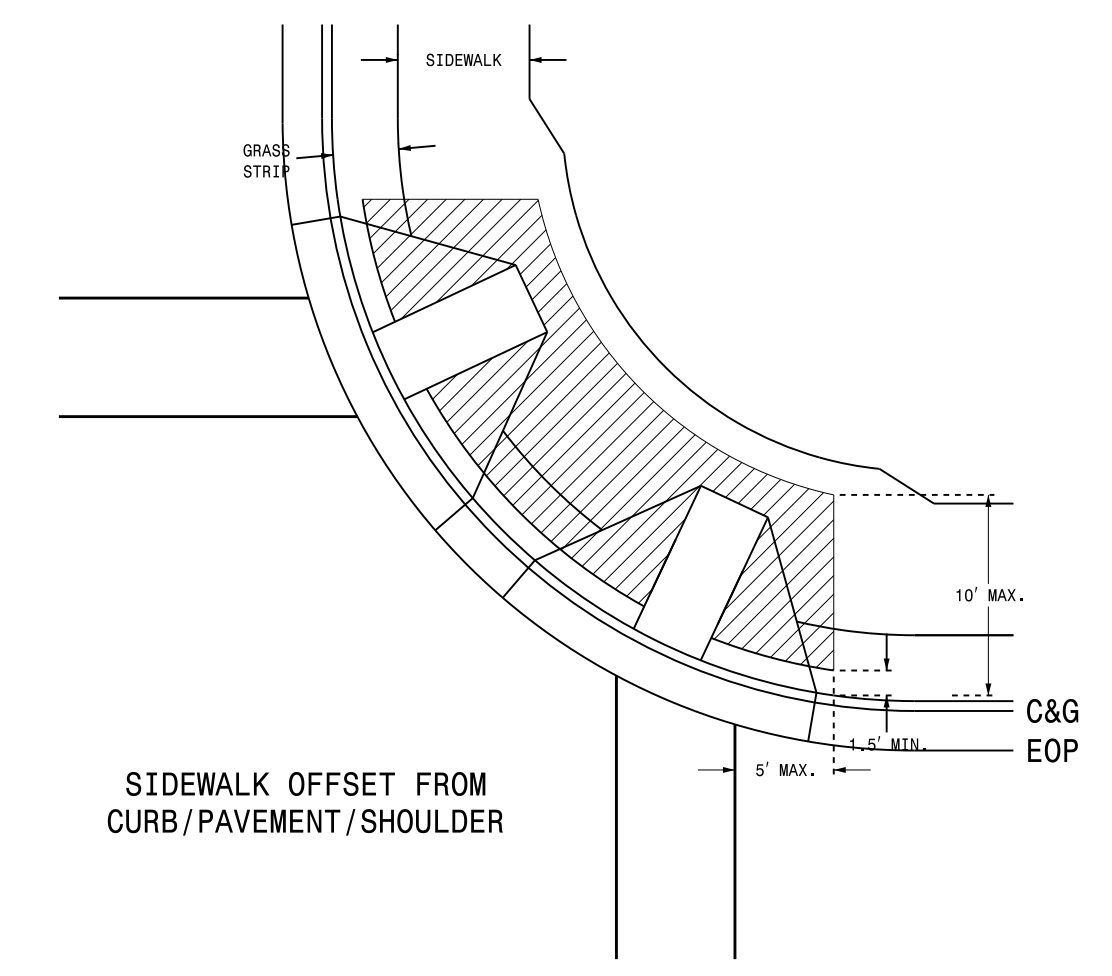
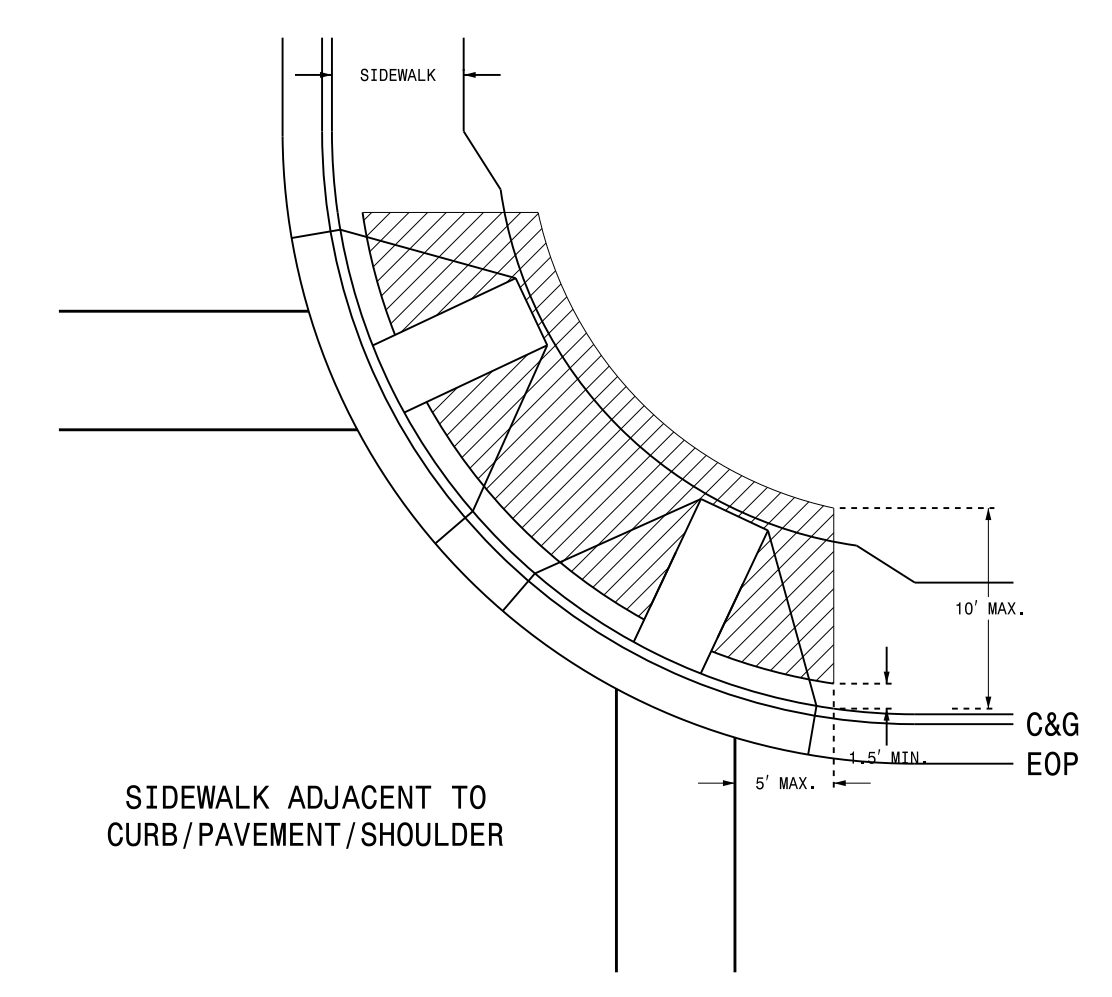
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

06-14

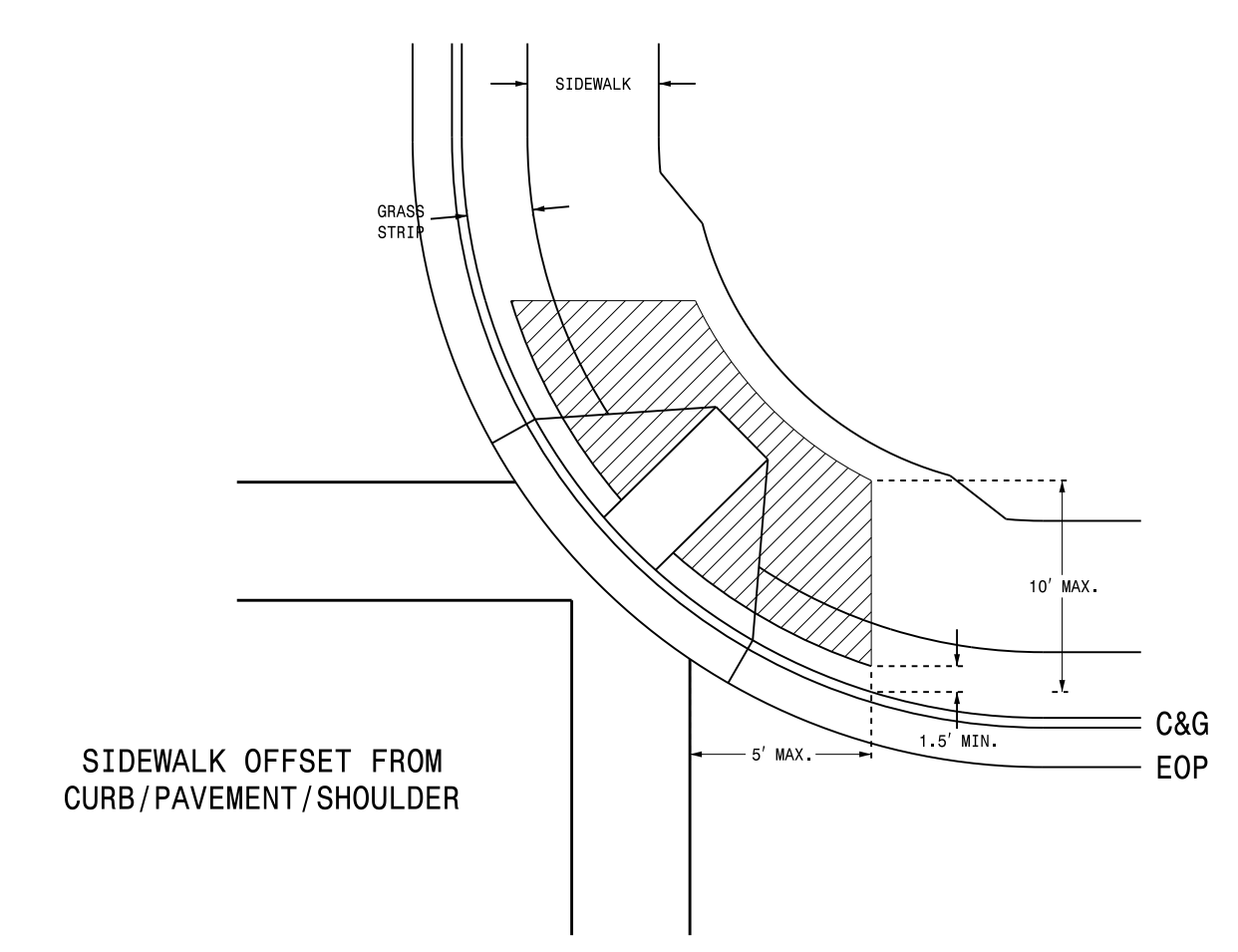
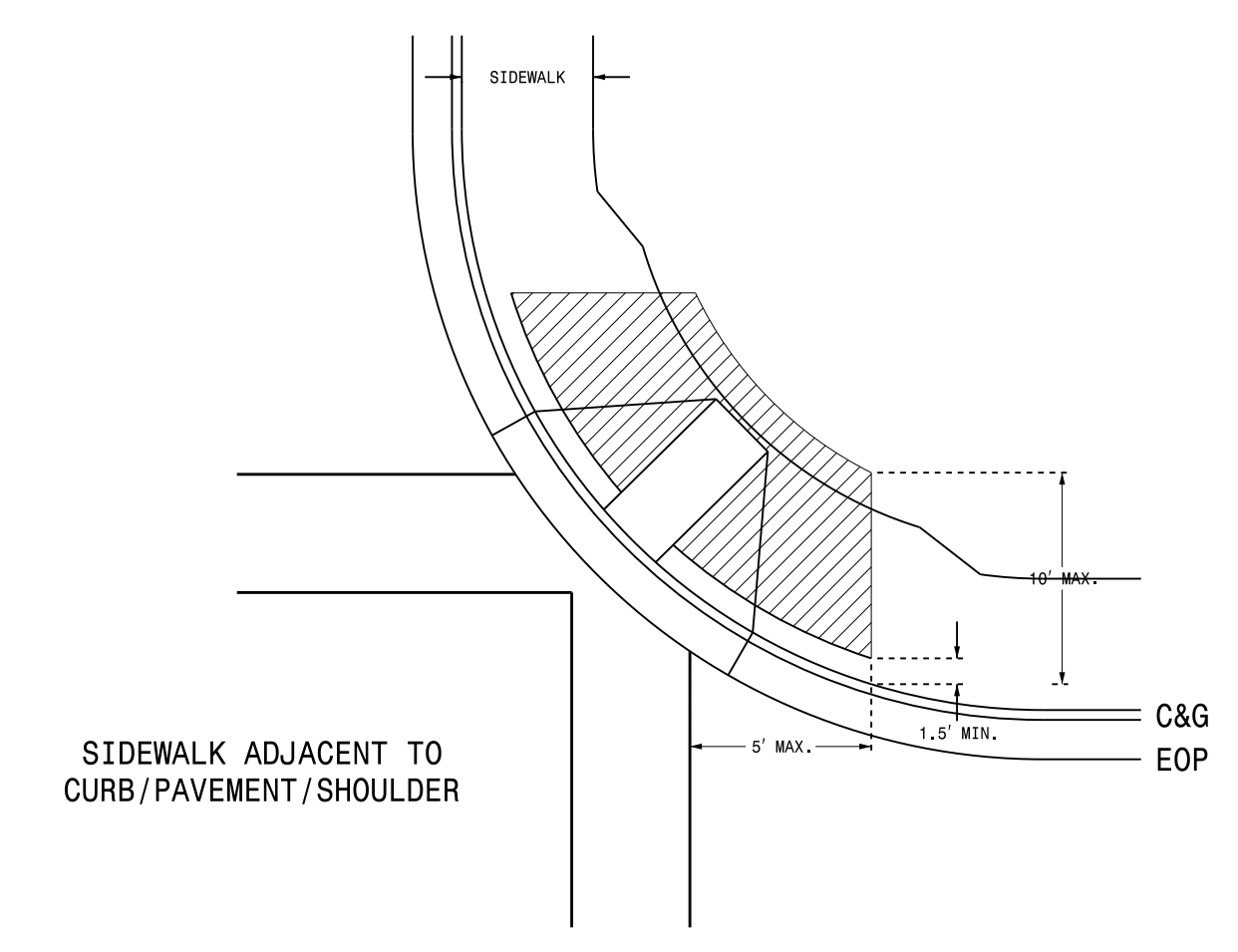
ENGLISH DETAIL DRAWING FOR
PEDESTRIAN PUSHBUTTON LOCATIONS
PLACEMENT DETAIL

SHEET 1 OF 3
1705D01

PUSHBUTTON PLACEMENT
SEPARATE CURB RAMPS



PUSHBUTTON PLACEMENT
SHARED CURB RAMP



- NOTES**
1. Pushbutton pedestals should not be located further than 10 feet from the edge of curb, shoulder, or pavement.
 2. The face of the pushbutton should be parallel to the applicable crosswalk.
 3. Separate pushbuttons used on the same corner should be separated by a distance of at least 10 feet.
 4. Pushbuttons shall be installed adjacent to a level surface with a maximum reach distance of 10 inches.
 5. Maintain 4 feet of clearance around pedestal if located in sidewalk.
 6. Refer to section 1705 of the 2012 NCDOT Roadway Standard Drawings for Pushbutton Assembly details.
 7. Refer to section 1743 of the 2012 NCDOT Roadway Standard Drawings for Pedestal details.
 8. Contact Division Traffic Engineer for pushbutton location approval prior to installation.
 9. Curb ramps are for symbolic use only and may not reflect actual design or field conditions.

PROPOSED	LEGEND
	Signal Pole
	Type I Pushbutton Post
	Type II Signal Pedestal
	Pushbutton & Sign
	Pedestrian Signal Head
	Curb Ramp
	Pushbutton Location Area

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

06-14

ENGLISH DETAIL DRAWING FOR
PEDESTRIAN PUSHBUTTON LOCATIONS
PLACEMENT DETAIL

SHEET 1 OF 3
1705D01

See Plate for Title

Prepared in the Offices of:

750 N. Greenfield Parkway
Garner, NC 27529

SEAL

DocuSigned by:
Robert J. Ziemba
18084828744604

SIGNATURE

6/17/2014
DATE

06-AUG-2014 16:37
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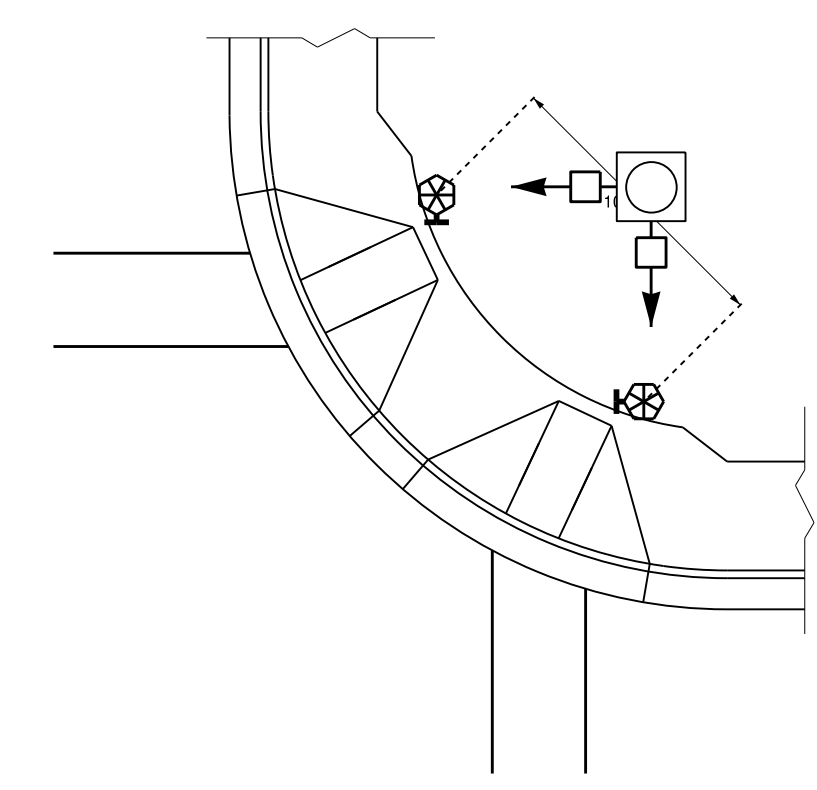
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DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

06-14

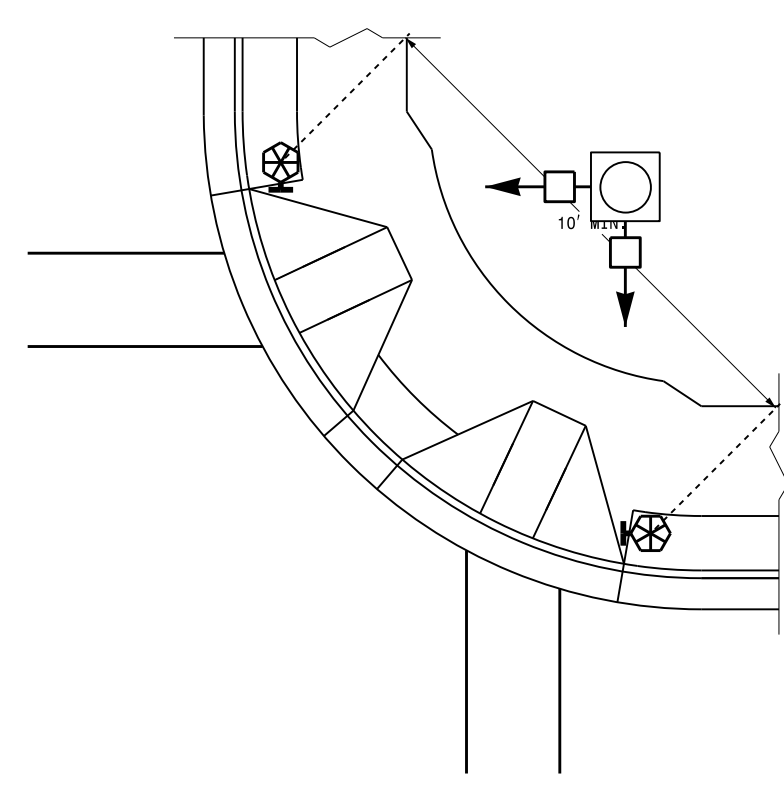
ENGLISH DETAIL DRAWING FOR
PEDESTRIAN PUSHBUTTON LOCATIONS
PLACEMENT DETAIL

SHEET 2 OF 3
1705D01

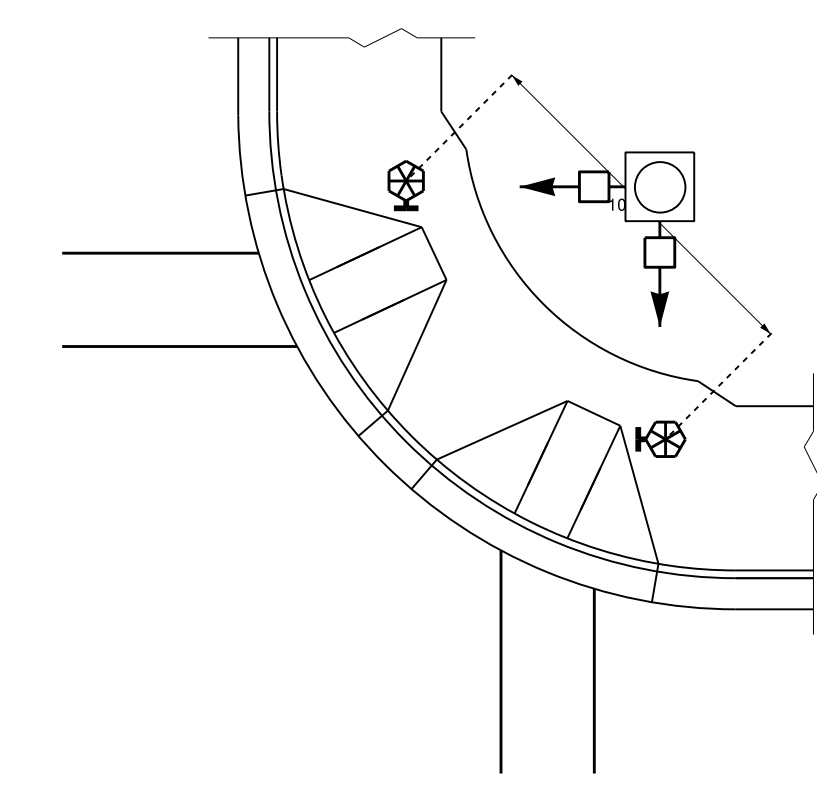
TYPICAL PUSHBUTTON LOCATIONS (CASE I)
SEPARATE CURB RAMPS W/ TYPE I PEDESTALS



BACK OF SIDEWALK IS WITHIN 10'
OF CURB OR PAVEMENT/SHOULDER



GRASS STRIP PLACEMENT IF BACK
OF SIDEWALK EXCEEDS 10' FROM
CURB OR PAVEMENT/SHOULDER

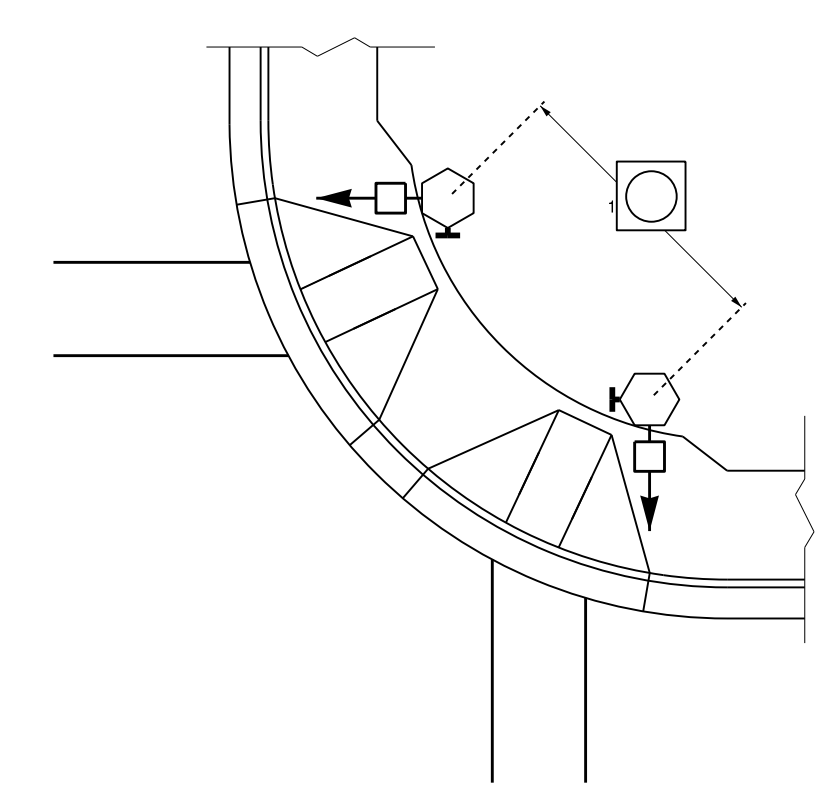


PUSHBUTTON PLACEMENT
IN WIDE SIDEWALK

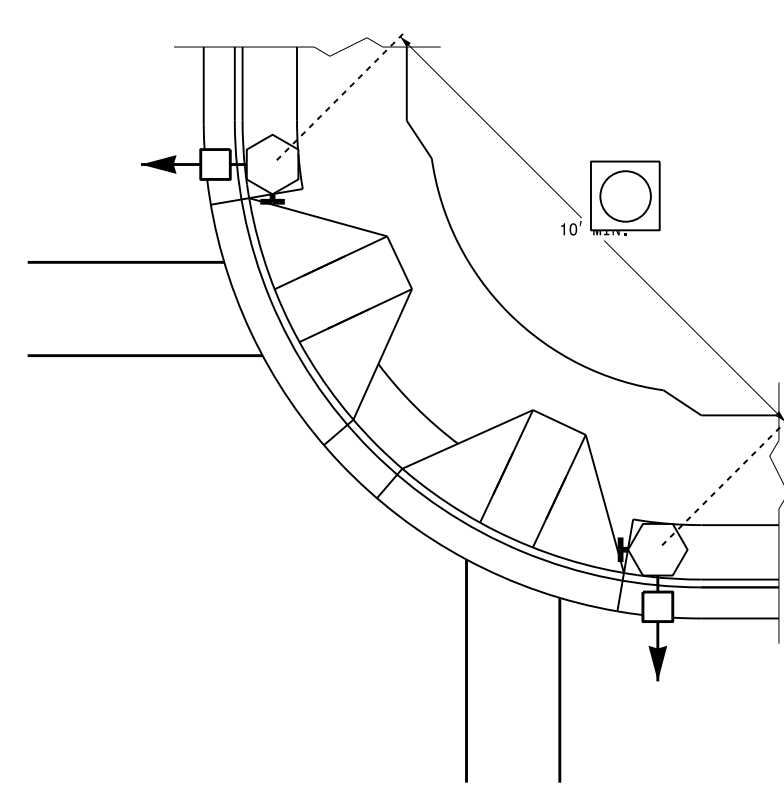
PROPOSED

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	Type I Pushbutton Post
	Type II Signal Pedestal
	Pushbutton & Sign
	Pedestrian Signal Head
	Curb Ramp
	Pushbutton Location Area

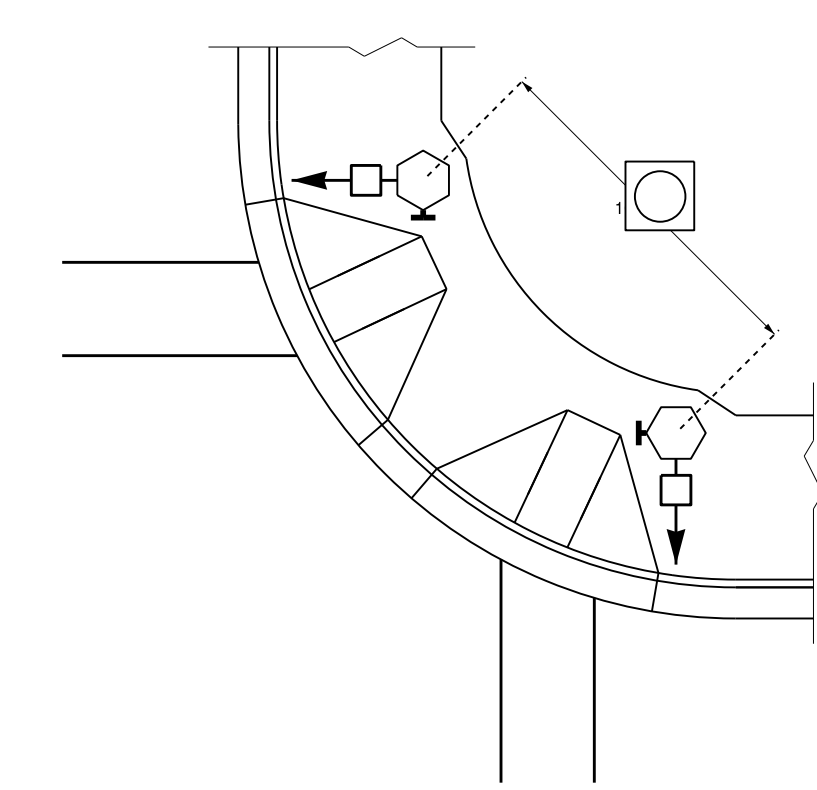
TYPICAL PUSHBUTTON LOCATIONS (CASE II)
SEPARATE CURB RAMPS W/ TYPE II PEDESTALS



BACK OF SIDEWALK IS WITHIN 10'
OF CURB OR PAVEMENT/SHOULDER

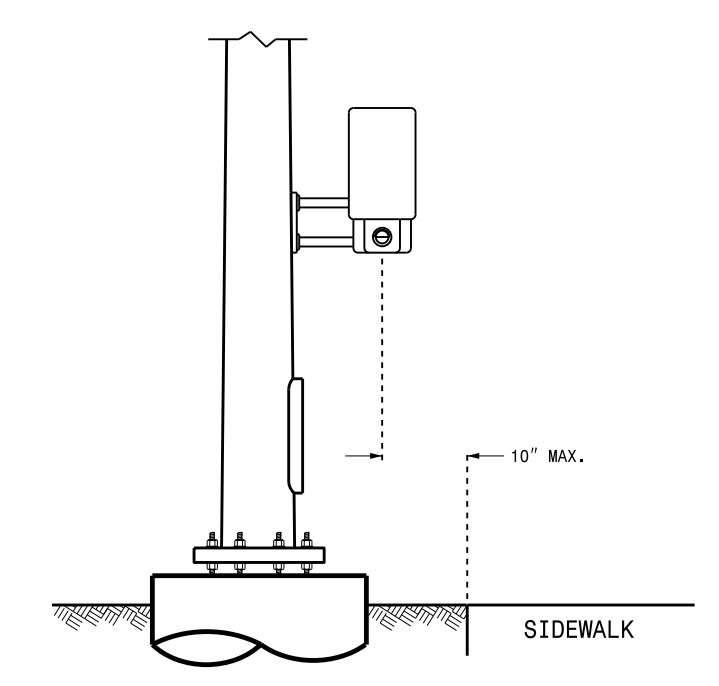


GRASS STRIP PLACEMENT IF BACK
OF SIDEWALK EXCEEDS 10' FROM
CURB OR PAVEMENT/SHOULDER



PUSHBUTTON PLACEMENT
IN WIDE SIDEWALK

OPTIONAL PUSHBUTTON EXTENSION
FACE OF PUSHBUTTON PARALLEL TO
APPLICABLE CROSSWALK



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RALEIGH, N.C.

06-14

ENGLISH DETAIL DRAWING FOR
PEDESTRIAN PUSHBUTTON LOCATIONS
PLACEMENT DETAIL

SHEET 2 OF 3
1705D01

See Plate for Title

Prepared in the Offices of:

750 N. Greenfield Parkway
Garner, NC 27529

SEAL

DocuSigned by:

1888488274464

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6/17/2014

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06-14

ENGLISH DETAIL DRAWING FOR
PEDESTRIAN PUSHBUTTON LOCATIONS
PLACEMENT DETAIL

SHEET 3 OF 3
1705D01

STATE OF NORTH CAROLINA
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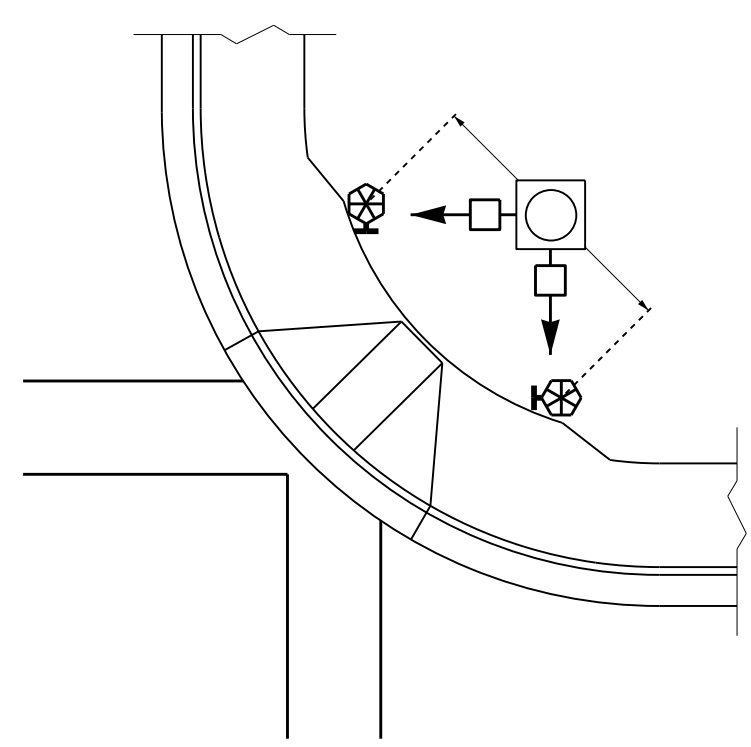
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ENGLISH DETAIL DRAWING FOR
PEDESTRIAN PUSHBUTTON LOCATIONS
PLACEMENT DETAIL

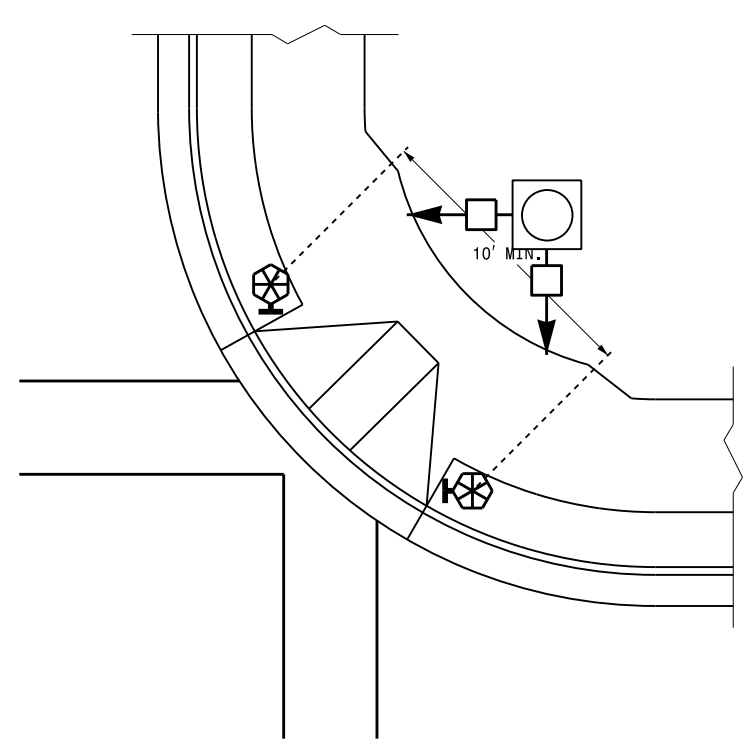
SHEET 3 OF 3
1705D01

TYPICAL PUSHBUTTON LOCATIONS (CASE III)

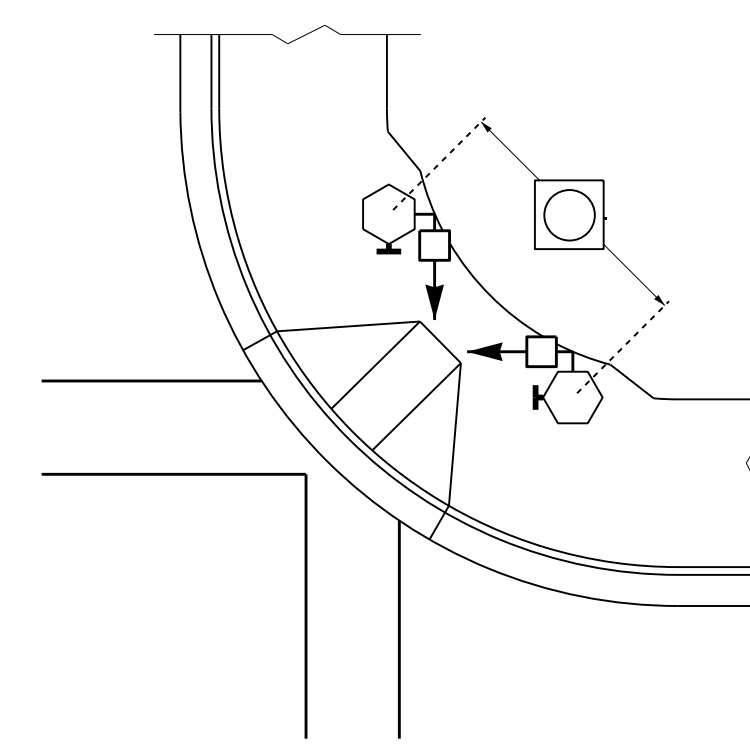
SHARED CURB RAMPS



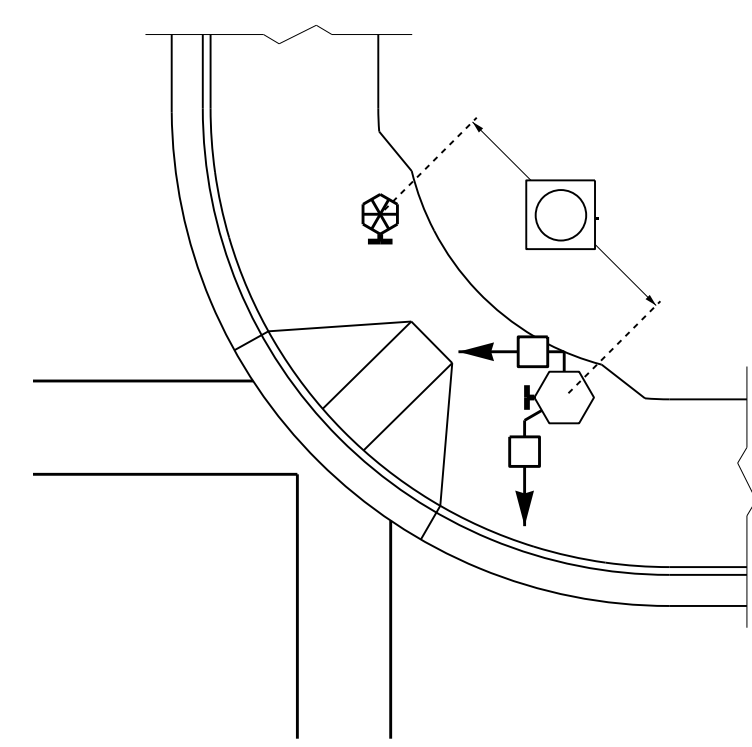
BACK OF SIDEWALK IS WITHIN 10' OF CURB OR PAVEMENT/SHOULDER



GRASS STRIP PLACEMENT IF BACK OF SIDEWALK EXCEEDS 10' FROM CURB OR PAVEMENT/SHOULDER

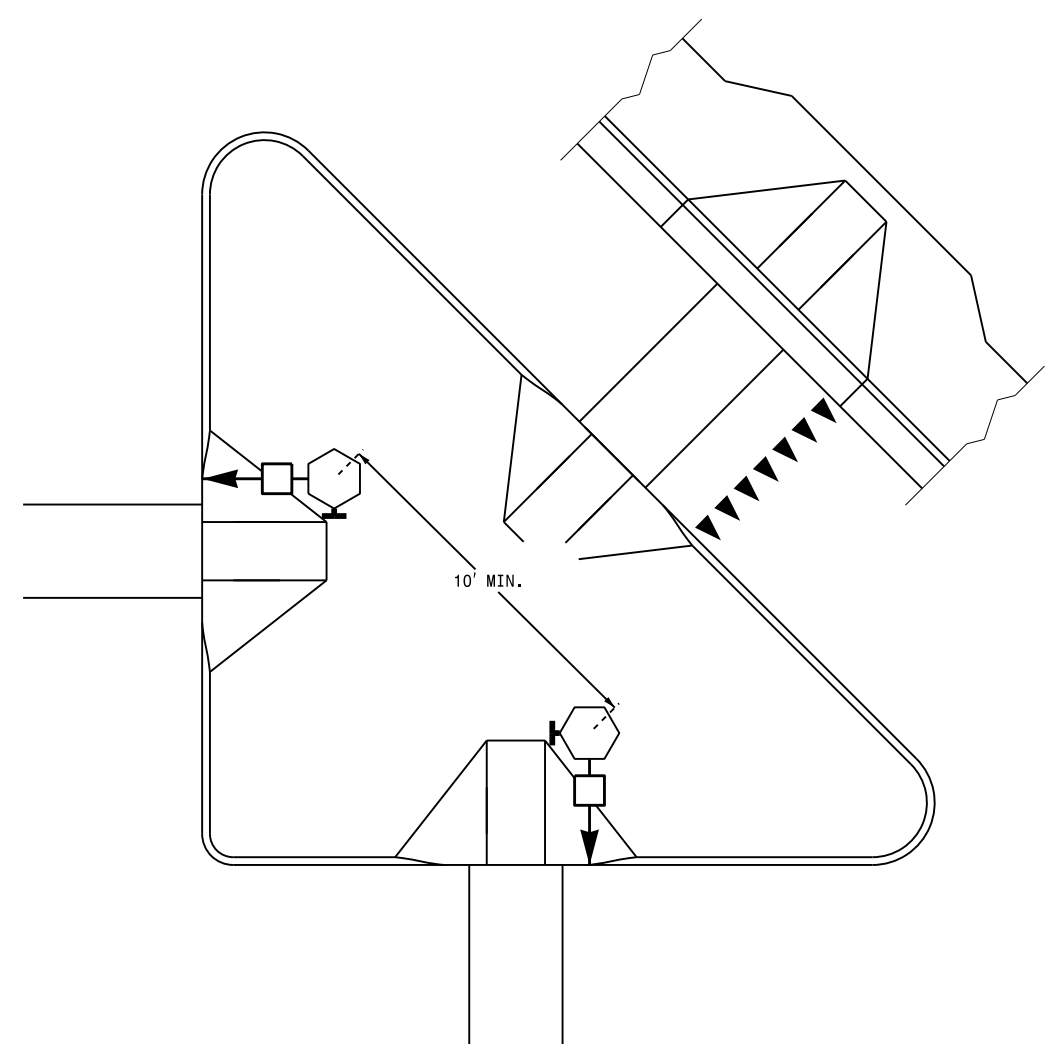


PUSHBUTTON PLACEMENT IN WIDE SIDEWALK (CORRESPONDING PUSHBUTTONS AND SIGNAL HEADS ON DIFFERENT PEDESTALS)

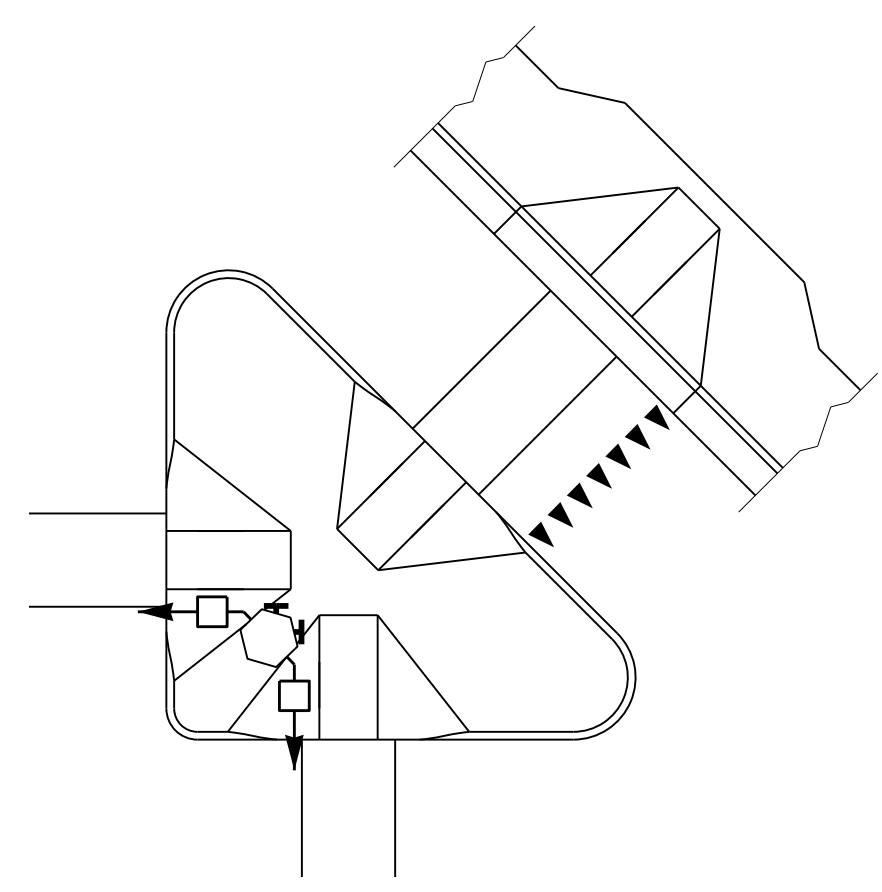


PUSHBUTTON PLACEMENT WITH SHARED TYPE II SIGNAL PEDESTAL AND TYPE I PUSHBUTTON POST

TRAFFIC ISLAND PUSHBUTTON LOCATIONS



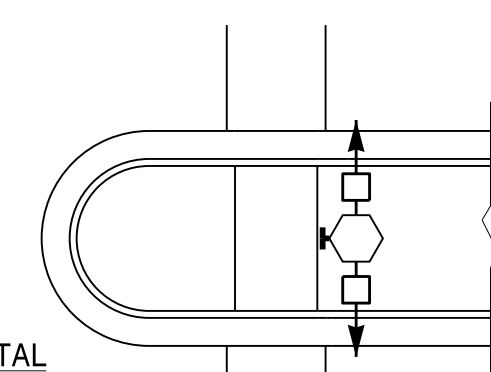
PUSHBUTTON PLACEMENT IN LARGE "PORK CHOP ISLAND" WITH SEPARATE PEDESTALS



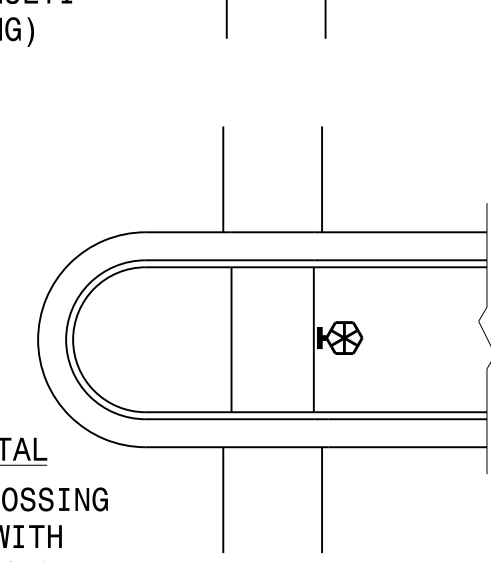
PUSHBUTTON PLACEMENT IN SMALL "PORK CHOP ISLAND" WITH SHARED PEDESTAL

PUSHBUTTON PLACEMENT IN MEDIAN

TYPE II PEDESTAL (FOR STAGED OR MULTI-PHASE CROSSING)



TYPE I PEDESTAL (FOR COMPLETE CROSSING CURB TO CURB WITH OPTIONAL REFUGE)



PROPOSED

	Signal Pole
	Type I Pushbutton Post
	Type II Signal Pedestal
	Pushbutton & Sign
	Pedestrian Signal Head
	Curb Ramp
	Pushbutton Location Area

LEGEND

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