APPENDIX A

SIGNAL PERMIT PLANS AND TIMINGS

WORK ORDER S11186	5th Street (Independence Mall East) and Arch Street				Traffic Engineering District #1
SIGNAL	Prepared by Sunil Cecil	Date 07/07/11	WORK COMPLETED by Jeffrey Venzale	Date 12/12/2011	Release date 12/14/2011
	Approved by C Denny	Date 7/8/11	INSPECTED by	Date	

#	Phase Movements	1	2	3	4	5	6	7	8	Flash	Minimums G	Minimums M	Minimums FH	Extension	Maximums G	Maximums M	Maximums FH
		8+P4+P8				2+P2+P6											
2	NB 5th Street	R	R	R	R	G	G	Y	R	R							
5																	
6																	
1																	
4																	
7																	
8	WB Arch Street	G	G	Y	R	R	R	R	R	Y							
3																	
P2	East side crosswalk	H	H	H	H	M	FH	H	H	OFF							
P6	West side crosswalk	H	H	H	H	M	FH	H	H	OFF							
P4	South side crosswalk	M	FH	H	H	H	H	H	H	OFF							
P8	North side crosswalk	M	FH	H	H	H	H	H	H	OFF							
	Program 1	11	13	3.7	2.3	13	11	3.4	2.6	60 secs							
	Program 2	11	13	3.7	2.3	13	11	3.4	2.6	60 secs							
	Program 3	11	13	3.7	2.3	13	11	3.4	2.6	60 secs							

Time of Day Plan

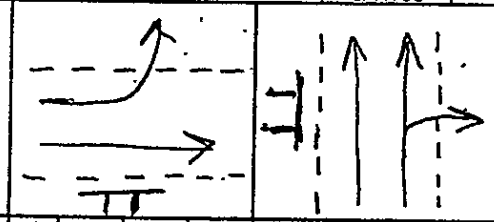
Event	Day	Time	Cycle	Plan	Offset	Remarks
1	1-7	0:00	60	3	15	

Instructions: Install timings.

TE SHOP

WORK ORDER S21096	5th Street (Independence Mall East) & Chestnut Street			District 2
SIGNAL	Prepared by Mark N. Washington	Date 3/17/08	WORK COMPLED by Matthew E. Sherman	Date 5-1-08
	Approved by	Date 3/17/08	INSPECTED by	Date

Release date



#	PHASE intervals	1	2	3	4	5	6	7	8	9	10	11	flash	Minimums G	Minimums M	Minimums FH	Max
2	5th Street	R	R	R	R	G	G	Y	R				flash	G	M	FH	
5													Y				
6																	
1																	
4	Chestnut Street	G	G	Y	R	R	R	R	R								
7													R	14.4			
8																	
3																	
P2 + P6	5th Street Pedestrian	H	H	H	H	M	FH	H	H								
P4 + P8	Chestnut St. Pedestrian	M	FH	H	H	H	H	H	H				OFF				
													OFF		9.4	12.9	
	Seconds	10	14	3.6	2.4	10	14	3.6	2.4					60	Seconds		

Instructions: **Implement timings to as specified above.**

MSB

Rich Montanez

WORK ORDER S21096A	5th & Market Streets		District
SIGNAL	Prepared by: Charles Denny — Date: 5/29/08	WORK COMPLETED by: — Date: 6/12/08	Release date
	Approved by: Charles Denny — Date: 5/29/08	INSPECTED by: — Date:	

#	PHASE / Intervals	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	flash	Minimums G	Minimums M	Minimums FH	Max
8	EB Market	G	G	G		G	G	Y	R	R	R	R	R						5			
3	EB Market Left	<G	<Y	<R		<R	<R	<R	<R	<R	<R	<R	<R						5			
4	WB Market	R	R	R		G	G	Y	R	R	R	R	R						5			
1																						
2	NB 5th	R	R	R		R	R	R	R	G	G	Y	R									
7																						
8																						
3																						
P4	South Crosswalk	M	M	M		M	FH	H	H	H	H	H	H							7	9	
P6																						
P2	Crossing Market	H	H	H		H	H	H	H	M	FH	H	H							7	9	
P8	North Crosswalk	H	H	H		M	FH	H	H	H	H	H	H							7	9	
	Program 1	8	3	2		10	9	3	2	9	9	3	2					60				
	Program 2	13	3	2		7	9	3	2	7	9	3	2					60				
	Program 3																					

Event	
1	
2	
3	

OFFSETS	A	15	B		C

Instructions: Change Timing to Above leave all other settings alone

MSB

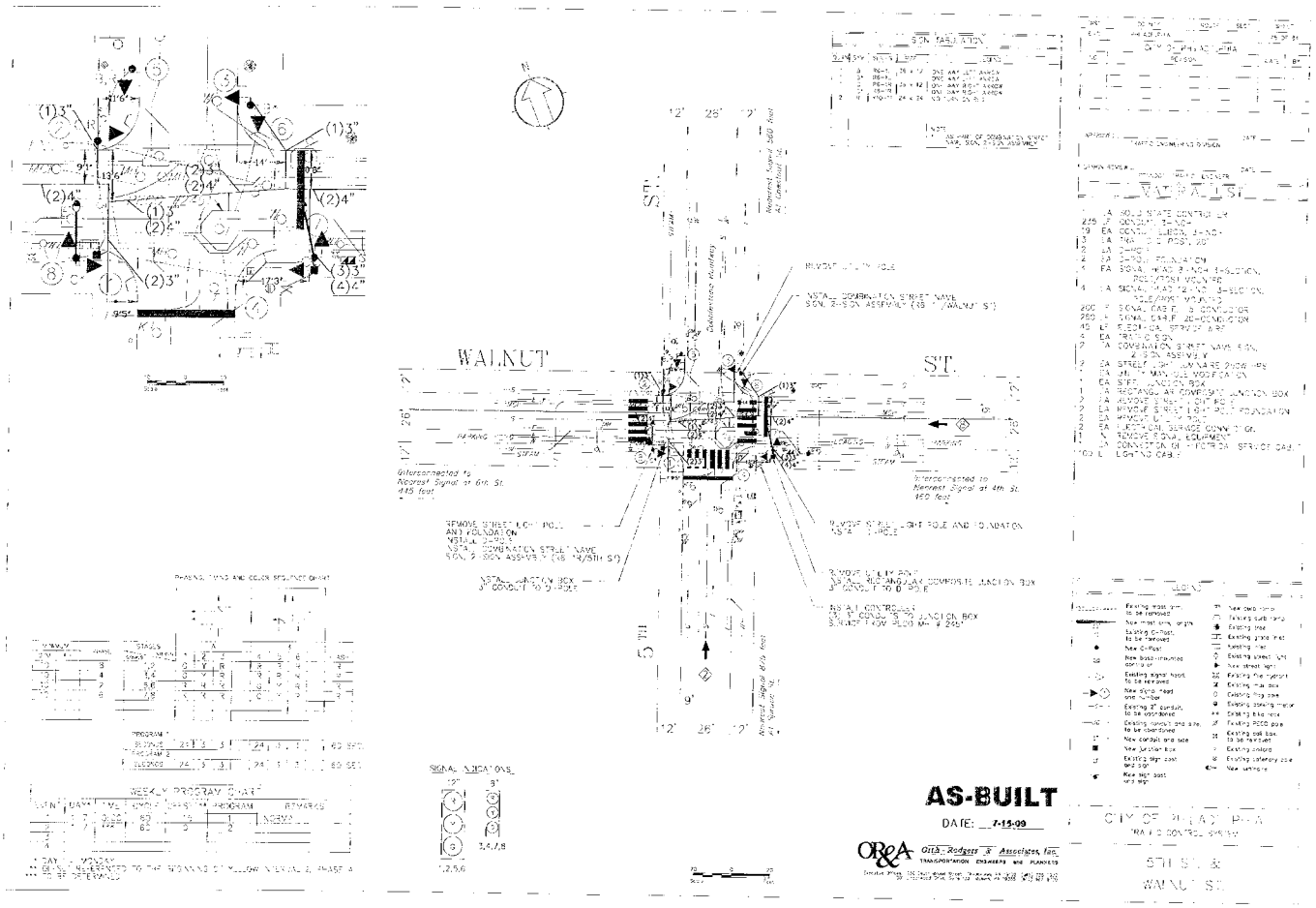
WORK ORDER S11188	5th Street and Race Street			Traffic Engineering District #1
SIGNAL	Prepared by [signature]	Date 07/07/11	WORK COMPLETED by [signature]	Date 12/12/2011
	Approved by C Denny	Date 7/8/11	INSPECTED by	Date
				Release date 12/14/2011

#	Phase Movements	1	2	3	4	5	6	7	8	Flash	Minimums G	Minimums M	Minimums FH	Extension	Maximums G	Maximums M	Maximums FH
		4+P4+P8				2+P2+P6											
2	NB 5th Street	R	R	R	R	G	G	Y	R	R							
5																	
6																	
1																	
4	EB Race Street	G	G	Y	R	R	R	R	R	Y							
7																	
8																	
3																	
P2	East side crosswalk	H	H	H	H	M	FH	H	H	OFF							
P6	West side crosswalk	H	H	H	H	M	FH	H	H	OFF							
P4	South side crosswalk	M	FH	H	H	H	H	H	H	OFF							
P8	North side crosswalk	M	FH	H	H	H	H	H	H	OFF							

	1	2	3	4	5	6	7	8														
Program 1	11	13	3.7	2.3	13	11	3.4	2.6						60	secs	Time of Day Plan						
Program 2	11	13	3.7	2.3	13	11	3.4	2.6						60	secs	Event	Day	Time	Cycle	Plan	Offset	Remarks
Program 3	11	13	3.7	2.3	13	11	3.4	2.6						60	secs	1	1-7	0:00	60	3	30	

Instructions: Install timings.

MSB


WALNUT
ST.
5TH
Interconnected to Nearest Signal at 6th St. 415 feet
Interconnected to Nearest Signal at 4th St. 450 feet
REMOVE STREET LIGHT POLE AND FOUNDATION
INSTALL DOMBRATION STREET NAME SIGN, 2-SIGN ASSEMBLY (AS 1 /WALNUT ST)
INSTALL JUNCTION BOX 3" CONDUIT TO D-POLE
REMOVE STREET LIGHT POLE AND FOUNDATION
REMOVE UTILITY POLE
INSTALL RECTANGULAR COMPOSITE JUNCTION BOX 3" CONDUIT TO D-POLE
INSTALL CONTROLLER
PHASING, TIMING AND COLOR SEQUENCE CHART
WEEKLY PROGRAM CHART
SIGNAL INDICATIONS
LEGEND
CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM
5TH ST. &
WALNUT ST.
AS-BUILT
DATE: 7-15-09
OR&A
Orth - Rodgers & Associates, Inc.
TRANSPORTATION ENGINEERS and PLANNERS

WORK ORDER S11187	6th Street (Independence Mall West) and Arch Street				Traffic Engineering District #1
SIGNAL	Prepared by [signature]	Date 07/07/11	WORK COMPLETED by [signature]	Date 12/12/2011	Release date 12/14/2011
	Approved by C Denny	Date 7/8/11	INSPECTED by [signature]	Date	

#	Phase Movements	1	2	3	4	5	6	7	8	Flash	Minimums G	Minimums M	Minimums FH	Extension	Maximums G	Maximums M	Maximums FH
		8+P4+P8				6+P2+P6											
2																	
5																	
6	SB 6th Street	R	R	R	R	G	G	Y	R	R							
1																	
4																	
7																	
8	WB Arch Street	G	G	Y	R	R	R	R	R	Y							
3																	
P2	East side crosswalk	H	H	H	H	M	FH	H	H	OFF							
P6	West side crosswalk	H	H	H	H	M	FH	H	H	OFF							
P4	South side crosswalk	M	FH	H	H	H	H	H	H	OFF							
P8	North side crosswalk	M	FH	H	H	H	H	H	H	OFF							
	Program 1	11	13	3.7	2.3	13	11	3.4	2.6	60 secs							
	Program 2	11	13	3.7	2.3	13	11	3.4	2.6	60 secs							
	Program 3	11	13	3.7	2.3	13	11	3.4	2.6	60 secs							

Time of Day Plan

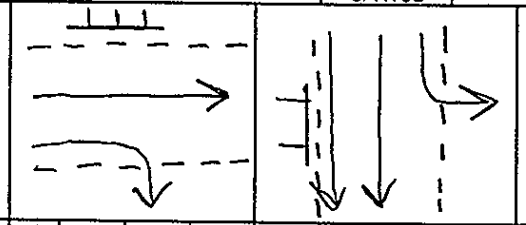
Event	Day	Time	Cycle	Plan	Offset	Remarks
1	1-7	0:00	60	3	30	

Instructions: Install timings.

TE SHOP

WORK ORDER S21095	6th Street (Independence Mall West) & Chestnut Street			District 2
SIGNAL	Prepared by Mark N. Washington	Date 3/17/08	WORK COMPLED by	Date 6/12/08
	Approved by	Date 3/17/08	INSPECTED by	Date

Release date



#	PHASE intervals	1	2	3	4	5	6	7	8	9	10	11	flash	G	M	FH	Max
														Minimums			
2																	
5																	
6	6th Street	R	R	R	R	G	G	Y	R				Y				
1																	
4	Chestnut Street	G	G	Y	R	R	R	R	R				R	14.4			
7																	
8																	
3																	
P2 + P6	6th Street Pedestrian	H	H	H	H	M	FH	H	H				OFF				
P4 + P8	Chestnut St. Pedestrian	M	FH	H	H	H	H	H	H				OFF		9.4	12.9	
	Seconds	10	14	3.6	2.4	10	14	3.6	2.4					60	Seconds		

Instructions: **Implement timings to as specified above.**

MSB

WORK ORDER S11181	Independence Mall West (6th Street) and Market Street				Traffic Engineering District #1
SIGNAL	Prepared by Sunil Gill	Date 07/01/11	WORK COMPLETED by Jeffrey Venzirde	Date 12/13/2011	Release date 12/14/2011
	Approved by C Dunn	Date 7/6/11	INSPECTED by	Date	

#	Phase Movements	1	2	3		4	5	6	7	Flash	Minimums G	Minimums M	Minimums FH	Extension	Maximums G	Maximums M	Maximums FH
		2+6+P6+P2				4+P4+P8											
2																	
5																	
6	SB 6th Street	R	R	R		G	G	Y	R	R							
1																	
4	EB Market Street	G	Y	R		R	R	R	R	Y							
7																	
8	WB Market Street	G	Y	R		R	R	R	R	Y							
3																	
P2	East side crosswalk	H	H	H		M	FH	H	H	OFF							
P6	West side crosswalk	H	H	H		M	FH	H	H	OFF							
P4																	
P8																	

Program 1	24	3.7	2.3	7	17	3.4	2.6	60	secs	
Program 2	24	3.7	2.3	7	17	3.4	2.6	60	secs	
Program 3	24	3.7	2.3	7	17	3.4	2.6	60	secs	

Time of Day Plan

Event	Day	Time	Cycle	Plan	Offset	Remarks
1	1-7	0:00	60	3	0	

Instructions: Install timings.

MSB

WORK ORDER S11189	6th Street and Race Street				Traffic Engineering District #1
SIGNAL	Prepared by Emil Ceiley	Date 07/07/11	WORK COMPLETED by Jeffrey Venzide	Date 12/13/2011	Release date 12/14/2011
	Approved by C Dimmer	Date 7/8/11	INSPECTED by	Date	

#	Phase Movements	1	2	3	4	5	6	7	8	Flash	Minimums G	Minimums M	Minimums FH	Extension	Maximums G	Maximums M	Maximums FH
		4+P4				6+P6											
2																	
5																	
6	SB 6th Street	R	R	R	R	G	G	Y	R	R							
1																	
4	EB Race Street	G	G	Y	R	R	R	R	R	Y							
7																	
8																	
3																	
P2																	
P6	West side crosswalk	H	H	H	H	M	FH	H	H	OFF							
P4	South side crosswalk	M	FH	H	H	H	H	H	H	OFF							
P8																	

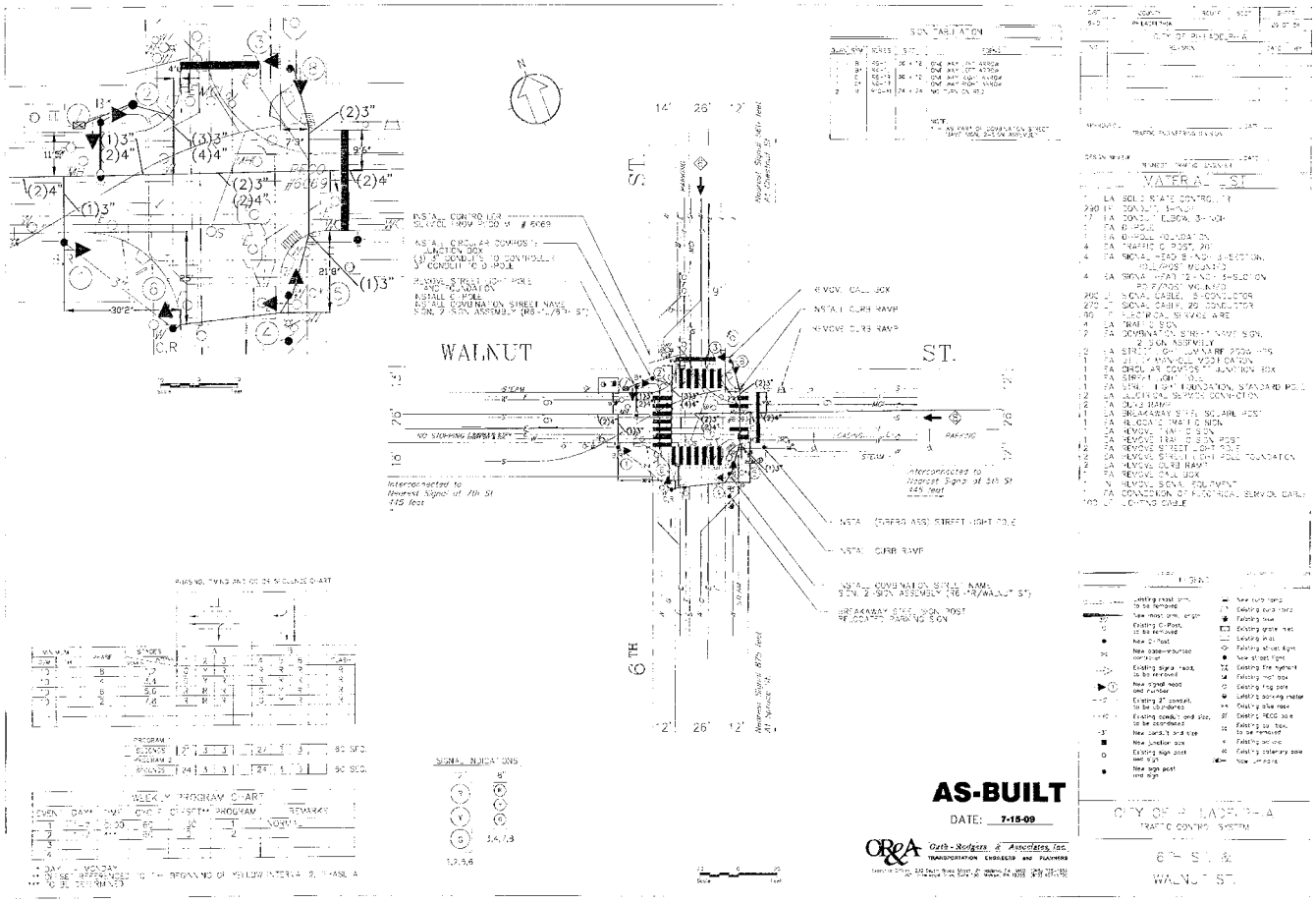
Program 1	11	13	3.7	2.3	7	17	3.4	2.6	60	secs	
Program 2	11	13	3.7	2.3	7	17	3.4	2.6	60	secs	
Program 3	11	13	3.7	2.3	7	17	3.4	2.6	60	secs	

Time of Day Plan

Event	Day	Time	Cycle	Plan	Offset	Remarks
1	1-7	0:00	60	3	15	

Instructions: Install timings.

TE SHOP

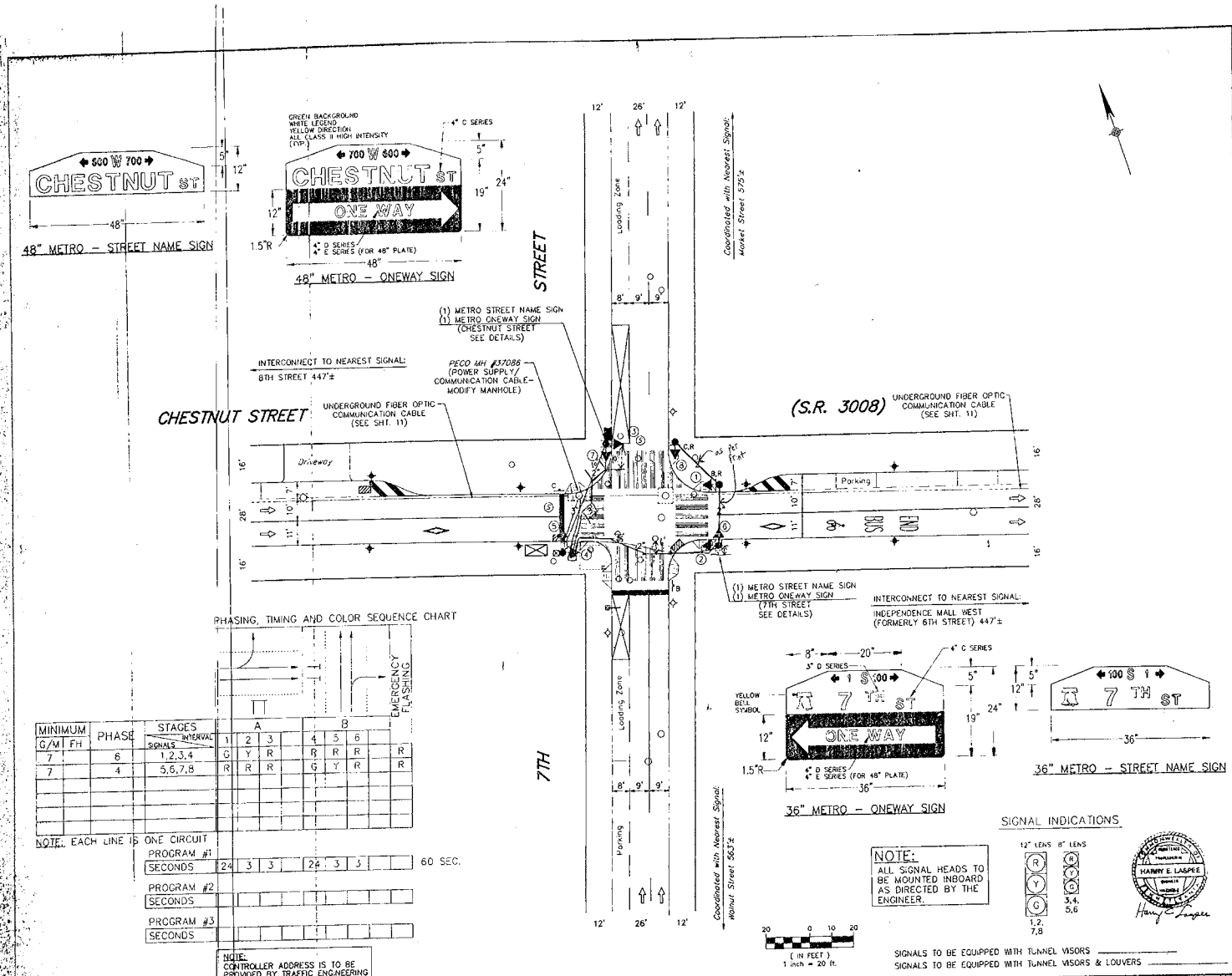

WALNUT
ST.
6TH
INSTALL CONTROLLER
INSTALL CIRCULAR COMPOSITE JUNCTION BOX
INSTALL COMBINATION STREET NAME SIGN, 2-SIGN ASSEMBLY
REMOVE CURB RAMP
INSTALL CURB RAMP
Interconnected to Nearest Signal at 7th St 445 feet
Interconnected to Nearest Signal at 5th St 445 feet
INSTALL (FIBERGLASS) STREET LIGHT POLE
INSTALL CURB RAMP
INSTALL COMBINATION STREET NAME SIGN, 2-SIGN ASSEMBLY (RE-HR/WALNUT ST)
BREAKAWAY STEEL SIGN POST
REFLECTED PARKING SIGN
PHASING TIMING AND CYCLE SEQUENCE CHART
WEEKLY PROGRAM CHART
SIGNAL INDICATIONS
AS-BUILT
DATE: 7-15-09
ORGA Guth - Rodgers & Associates, Inc.
TRANSPORTATION ENGINEERS AND PLANNERS
CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM
6TH ST. &
WALNUT ST.

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-3	PHILADELPHIA	3008		9 OF 11

CITY OF PHILADELPHIA

NO.	REVISION	DATE

APPROVED [signature] CITY TRAFFIC ENGINEER DATE 4/8/98



PHASING, TIMING AND COLOR SEQUENCE CHART

MINIMUM G/M	MINIMUM FH	PHASE	STAGES / INTERVAL / SIGNALS	A 1	A 2	A 3	B 4	B 5	B 6	EMERGENCY FLASHING
7		6	1,2,3,4	G	Y	R	R	R	R	R
7		4	5,6,7,8	R	R	R	G	Y	R	R

NOTE: EACH LINE IS ONE CIRCUIT

PROGRAM #1										
SECONDS	24	3	3		24	3	3			60 SEC.
PROGRAM #2										
SECONDS										
PROGRAM #3										
SECONDS										

NOTE: CONTROLLER ADDRESS IS TO BE PROVIDED BY TRAFFIC ENGINEERING

MATERIAL LIST

160	L.F.	CONDUIT, 2 INCH
55	L.F.	CONDUIT, 3 INCH
8	EACH	CONDUIT ELBOW, 2 INCH
6	EACH	CONDUIT ELBOW, 3 INCH
95	L.F.	CONDUIT TRENCH AND RESTORATION
1	EACH	TRAFFIC JUNCTION BOX, 18"x24"
2	EACH	UTILITY MANHOLE MODIFICATION
3	EACH	C-POST, 20 FT.
2	EACH	PEDESTAL POLE (SW & NW CORNERS)
4	EACH	SIGNAL HEAD, 12 INCH, 3 SECTION
4	EACH	SIGNAL HEAD, 8 INCH, 3 SECTION
1	EACH	CONTROLLER, TYPE 170, POLE MOUNTED
140	L.F.	SIGNAL CABLE, 5 CONDUCTOR
90	L.F.	SIGNAL CABLE, 15 CONDUCTOR
40	L.F.	ELECTRICAL SERVICE WIRE
1	EACH	CONNECTION OF ELECTRICAL SERVICE CABLE
1	INT.	REMOVE EXISTING SIGNAL EQUIPMENT
6	EACH	TRAFFIC SIGN – POST MOUNTED
1	EACH	36" METRO STREET NAME SIGN
1	EACH	48" METRO STREET NAME SIGN
1	EACH	36" METRO ONEWAY SIGN
1	EACH	48" METRO ONEWAY SIGN

LEGEND

New Mast Arm, Length	Curb ramp
Existing C-Post	Utility Pole
New C-Post	Detector Number
Controller	Support Number
Junction Box	Proposed Street Light
New Signal Head/Backplate And Number	Direction Arrow
New Conduit and Size	
Pedestrian Signal Head/Number	
Pedestrain Pushbutton/Sign	

SIGN TABULATION

QUAN	SYM	SERIES	SIZE	LEGEND
2	B	R5-1L	36"x12"	HORIZONTAL LEFT ONE WAY
2	C	R5-1R	36"x12"	HORIZONTAL RIGHT ONE WAY
2	R	R10-11	24"x30"	NO TURN ON RED

CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

PROPOSED IMPROVEMENTS FOR

7TH STREET AND CHESTNUT STREET (S.R. 3008)

PHST 7989.008.00 T2008 9/16/98

16087

DIST	COUNTY	ROUTE	SECT	SHEET
6-0	PHILADELPHIA	-		5 of 43

CITY OF PHILADELPHIA

REVISION NUMBER	REVISIONS	DATE	BY

APPROVED Charles J. Kraemer TRAFFIC ENGINEER DIVISION DATE 10/1/93

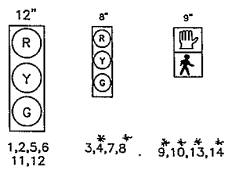
DESIGN REVIEW Douglas Shaw PENNDOT TRAFFIC ENGINEER DATE 10/25/93

PHASING, TIMING AND COLOR SEQUENCE CHART

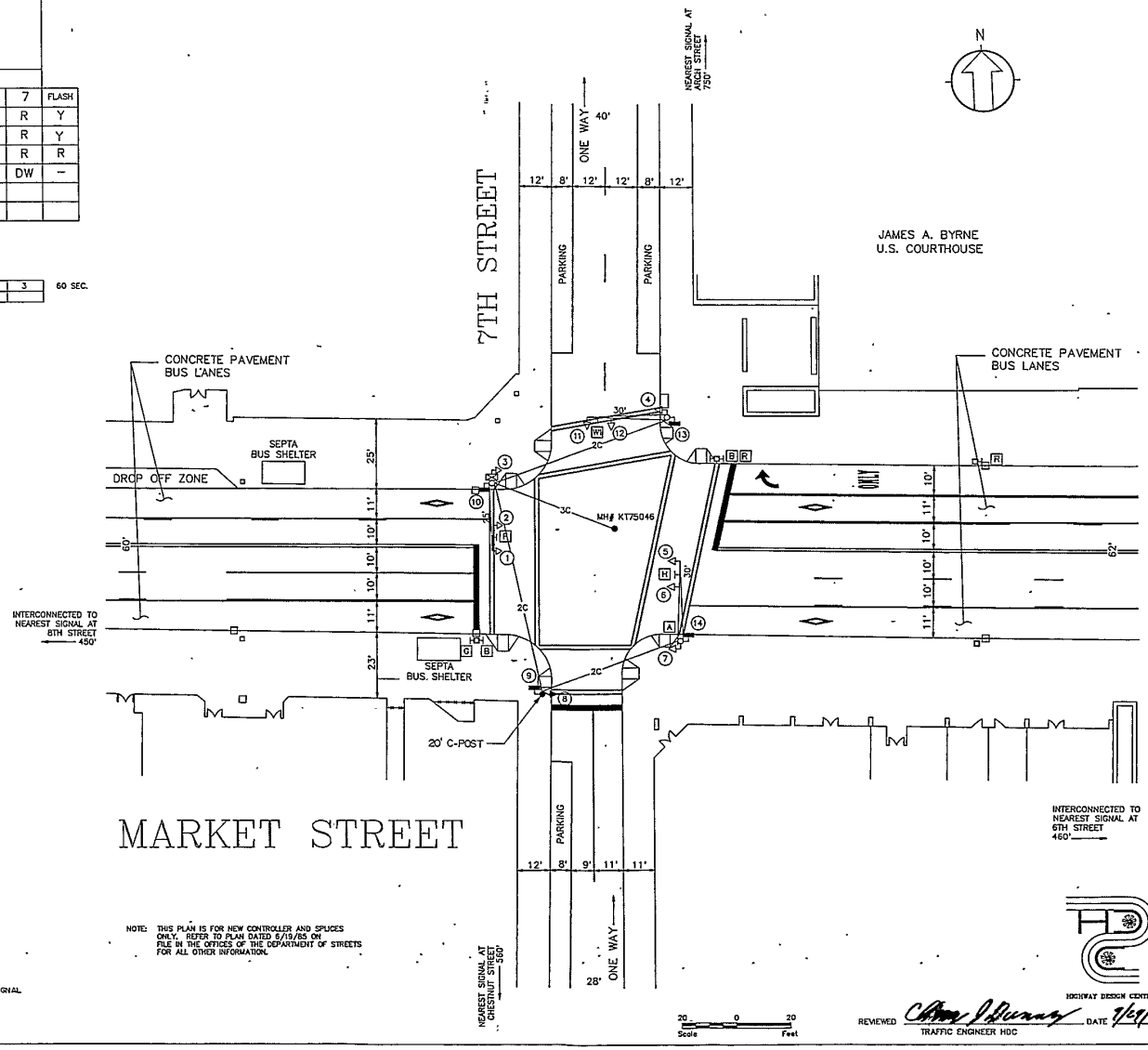
	PHASE	A			B				
	INTERVAL / SIGNALS	1	2	3	4	5	6	7	FLASH
SIGNAL GROUP	1,2,3,4	G	Y	R	R	R	R	R	Y
	5,6,7,8	G	Y	R	R	R	R	R	Y
	11,12	R	R	R	G	G	Y	R	R
	9,10,13,14	DW	DW	DW	W	FDW	DW	DW	–

PROGRAM 1								
SECONDS	29	3	3	10	9	3	3	60 SEC.

SIGNAL INDICATIONS



* INDICATES NEW SIGNAL



NOTE: THIS PLAN IS FOR NEW CONTROLLER AND SPLICES ONLY. REFER TO PLAN DATED 6/19/85 ON FILE IN THE OFFICES OF THE DEPARTMENT OF STREETS FOR ALL OTHER INFORMATION.

HIGHWAY DESIGN CENTER

REVIEWED Chas J. Burns TRAFFIC ENGINEER HDC DATE 7/29/93

MATERIAL LIST

QUANTITY/UNIT	DESCRIPTION
1 EA	170 CONTROLLER, SOLID STATE
1 EA	RENEW SPLICES
4 EA	PED HEAD 9-INCH 2-SECTION
1 EA	TRAFFIC C-POST, 20'
2 EA	SIGNAL HEAD 8-INCH 3- SECTION
50 LF	ELECTRICAL SERVICE WIRE
45 LF	TRAFFIC SIGNAL CABLE, 5-CONDUCTOR

LEGEND

35'	EXISTING MAST ARM, LENGTH		NEW CURB RAMP
35	NEW MAST ARM, LENGTH		EXISTING CURB RAMP
	EXISTING C-POST		EXISTING TREE
	NEW C-POST		EXISTING GRATE INLET
	CONTROLLER		EXISTING INLET
	EXISTING SIGNAL HEAD AND NUMBER		EXISTING STREET LIGHT
	NEW SIGNAL HEAD AND NUMBER		NEW STREET LIGHT
–C–	EXISTING 2" CONDUIT	FH	EXISTING FIRE HYDRANT
–3C–	EXISTING CONDUIT AND SIZE		EXISTING MAIL BOX
–2–	NEW CONDUIT AND SIZE	–A	SIGN & SYMBOL

SIGN TABULATION

QUAN	SYM	SERIES	SIZE	LEGEND
0	A	R6-2L	24 X 30	ONE WAY - LEFT
0	B	R6-2R	24 X 30	ONE WAY - RIGHT
0	F	R6-2R	36 X 36	ONE WAY - RIGHT
0	G	R3-3	24 X 24	NO TURNS
0	H	R3-3	36 X 36	NO TURNS
0	R	R3-7R	30 X 30	RIGHT LANE MUST TURN RIGHT
0	W-1	R10-11	30 X 36	NO TURN ON RED

CITY OF PHILADELPHIA

TRAFFIC CONTROL SYSTEM

7TH STREET and MARKET STREET

SHEET 5 of 43

CITY OF PHILADELPHIA

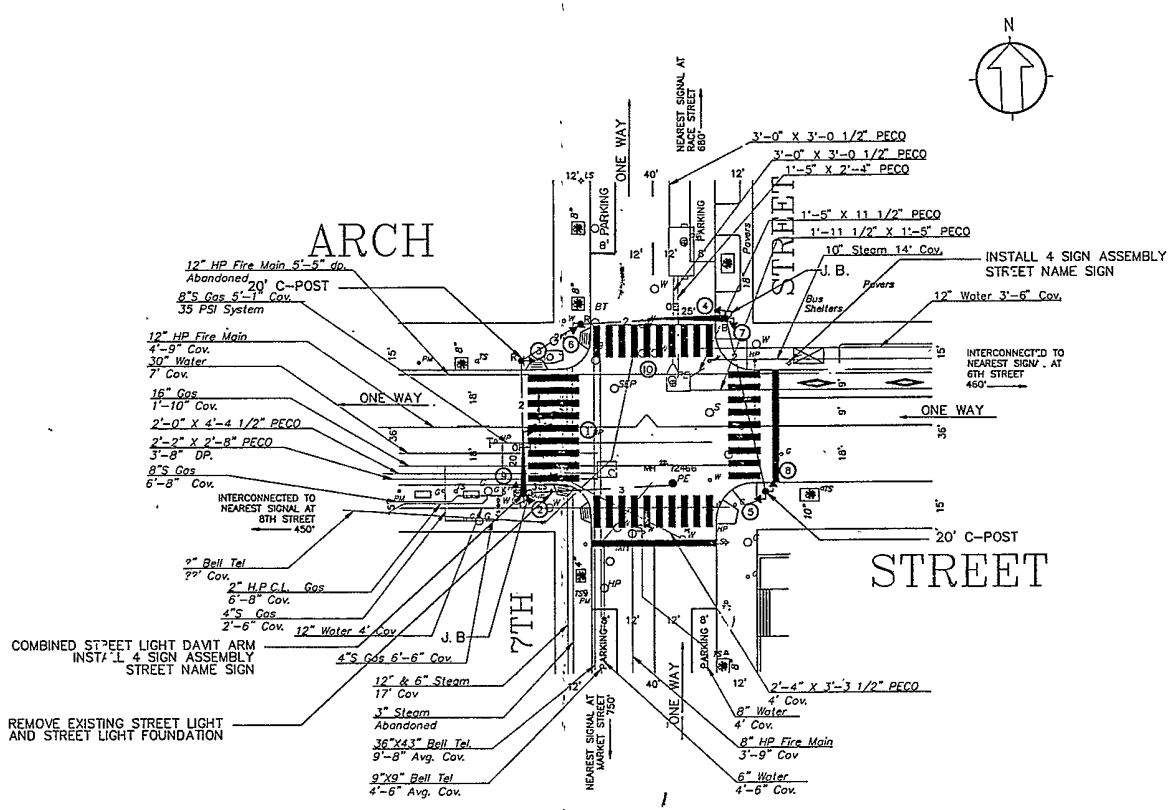
REVISION NUMBER	REVISIONS	DATE	BY

APPROVED Charles Trumbo DATE 8/11/93
TRAFFIC ENGINEER DIVISION

DESIGN REVIEW Douglas Mey DATE 10/25/93
PENNDOT TRAFFIC ENGINEER

MATERIAL LIST

1	EA	170 CONTROLLER, SOLID STATE
190	LF	TRAFFIC CONDUIT 2-INCH
130	LF	TRAFFIC CONDUIT 3-INCH
8	EA	CONDUIT ELBOW 2-INCH
3.	EA	CONDUIT ELBOW 3-INCH
2	EA	TRAFFIC C-POST 20'
210	LF	TRAFFIC SIGNAL CABLE 5-CONDUCTOR
230	LF	TRAFFIC SIGNAL CABLE 15-CONDUCTOR
30	LF	ELECTRICAL SERVICE WIRE 2 CONDUCTOR 10AWG
6	EA	TRAFFIC SIGNS
2	EA	STREET NAME SIGN 4 SIGN ASSEMBLY
4	EA	CURB RAMPS
10	EA	SIGNAL HEAD 8-INCH 3-SECTION
1	EA	20' MASTARM WITH STREET LIGHT
1	EA	25' MASTARM
2	EA	MASTARM FOUNDATION
2	EA	JUNCTION BOX, 12' X 18'
1	EA	TRAFFIC C-POST 13'



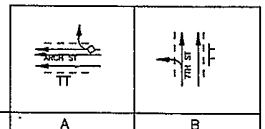
LEGEND

35'	EXISTING MAST ARM, LENGTH		NEW CURB RAMP
35'	NEW MAST ARM, LENGTH		EXISTING CURB RAMP
	EXISTING C-POST		EXISTING TREE
	NEW C-POST		EXISTING CRATE INLET
	CONTROLLER		EXISTING INLET
	EXISTING SIGNAL HEAD AND NUMBER		EXISTING STREET LIGHT
	NEW SIGNAL HEAD AND NUMBER		NEW STREET LIGHT
—C—	EXISTING 2" CONDUIT	FH	EXISTING FIRE HYDRANT
—3C—	EXISTING CONDUIT AND SIZE		EXISTING MAIL BOX
—2—	NEW CONDUIT AND SIZE	—A	SIGN & SYMBOL
			JUNCTION BOX

SIGN TABULATION

QUAN	SYM	SERIES	SIZE	LEGEND
1	B	R6-1L	36 X 12	ONE WAY LEFT ARROW
1	C	R6-1R	36 X 12	ONE WAY RIGHT ARROW
19	R	R10-11	24 X 24	NO TURN ON RED
1	OF	R6-2R	30 X 36	ONE WAY RIGHT ARROW
1	OE	R6-2L	30 X 36	ONE WAY LEFT ARROW

PHASING, TIMING AND COLOR SEQUENCE CHART

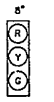


SIGNAL GROUP	PHASE	A			B			
	INTERVAL / SIGNALS	1	2	3	4	5	6	FLASH
	1,2,3,4,5	G	Y	R	R	R	R	Y
	6,7,8,9.10	R	R	R	G	Y	R	R

PROGRAM 1

SECONDS	25	3	25	24	3	25	60 SEC.

SIGNAL INDICATIONS



1,2,3,4,5
6,7,8,9.10

Effective as of 10/1/95
Cars & Duff, Inc.
Bid # 3186

REVIEWED Charles Trumbo DATE 8-9-93
TRAFFIC ENGINEER HDC

HIGHWAY DESIGN CENTER

Scale 20 0 20 Feet

CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

7TH STREET
and
ARCH STREET

SHEET 17 of 43

WORK ORDER S11190	7th Street and Race Street				Traffic Engineering District #1
SIGNAL	Prepared by: Sunil Cobb	Date: 07/07/11	WORK COMPLETED by: [signature] Jeffrey Vanzile	Date: 12/13/2011	Release date: 12/14/2011
	Approved by: C Dennn	Date: 7/8/11	INSPECTED by:	Date:	

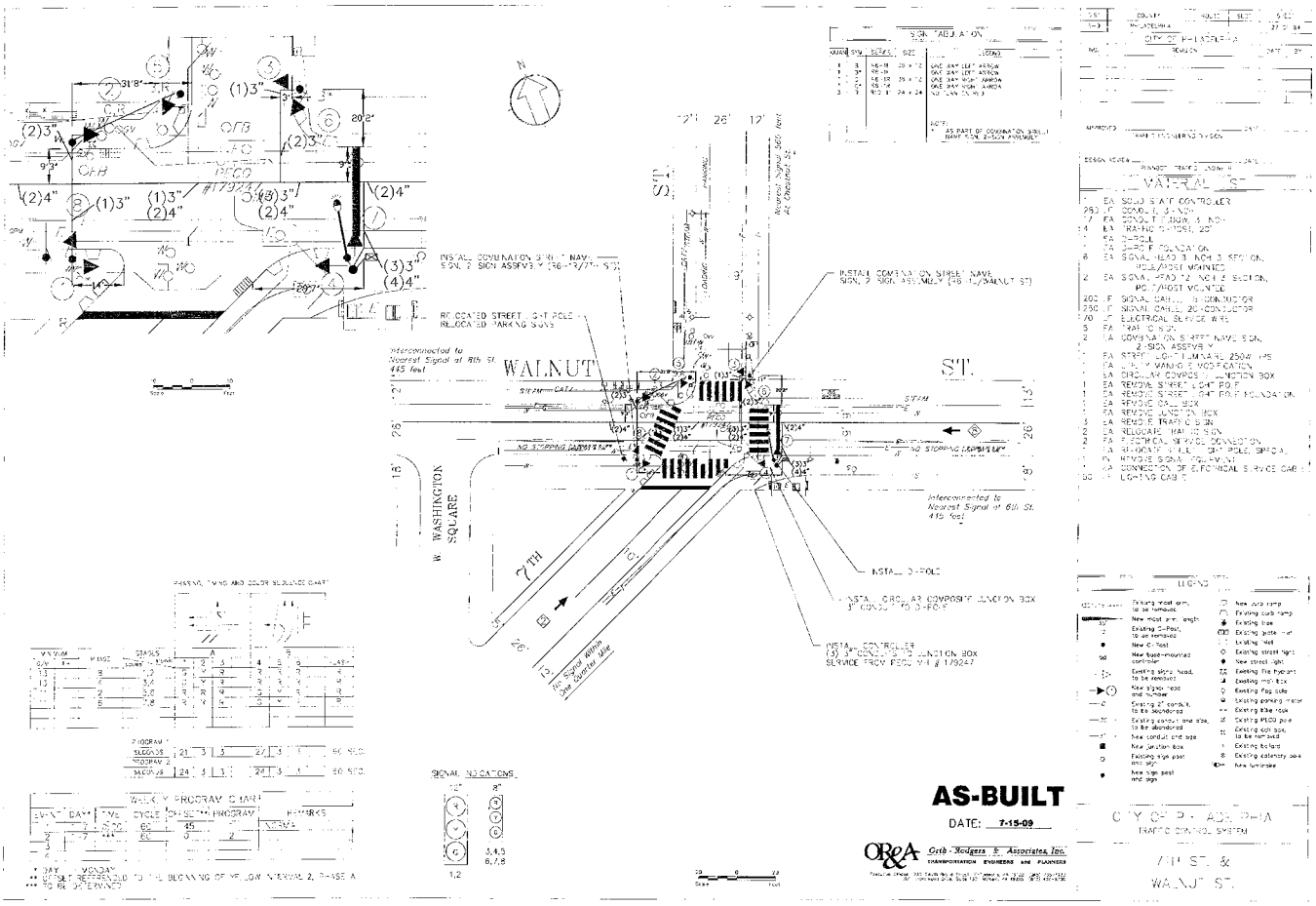
#	Phase Movements	1	2	3	4	5	6	7	8	Flash	Minimums G	Minimums M	Minimums FH	Extension	Maximums G	Maximums M	Maximums FH
		4+P4+P8				2+P2+P6											
2	NB 7th Street	R	R	R	R	G	G	Y	R	R							
5																	
6																	
1																	
4	EB Race Street	G	G	Y	R	R	R	R	R	Y							
7																	
8																	
3																	
P2	East side crosswalk	H	H	H	H	M	FH	H	H								
P6	West side crosswalk	H	H	H	H	M	FH	H	H	OFF							
P4	South side crosswalk	M	FH	H	H	H	H	H	H	OFF							
P8	North side crosswalk	M	FH	H	H	H	H	H	H								
	Program 1	11	13	3.7	2.3	7	17	3.4	2.6	60 secs							
	Program 2	11	13	3.7	2.3	7	17	3.4	2.6	60 secs							
	Program 3	11	13	3.7	2.3	7	17	3.4	2.6	60 secs							

Time of Day Plan

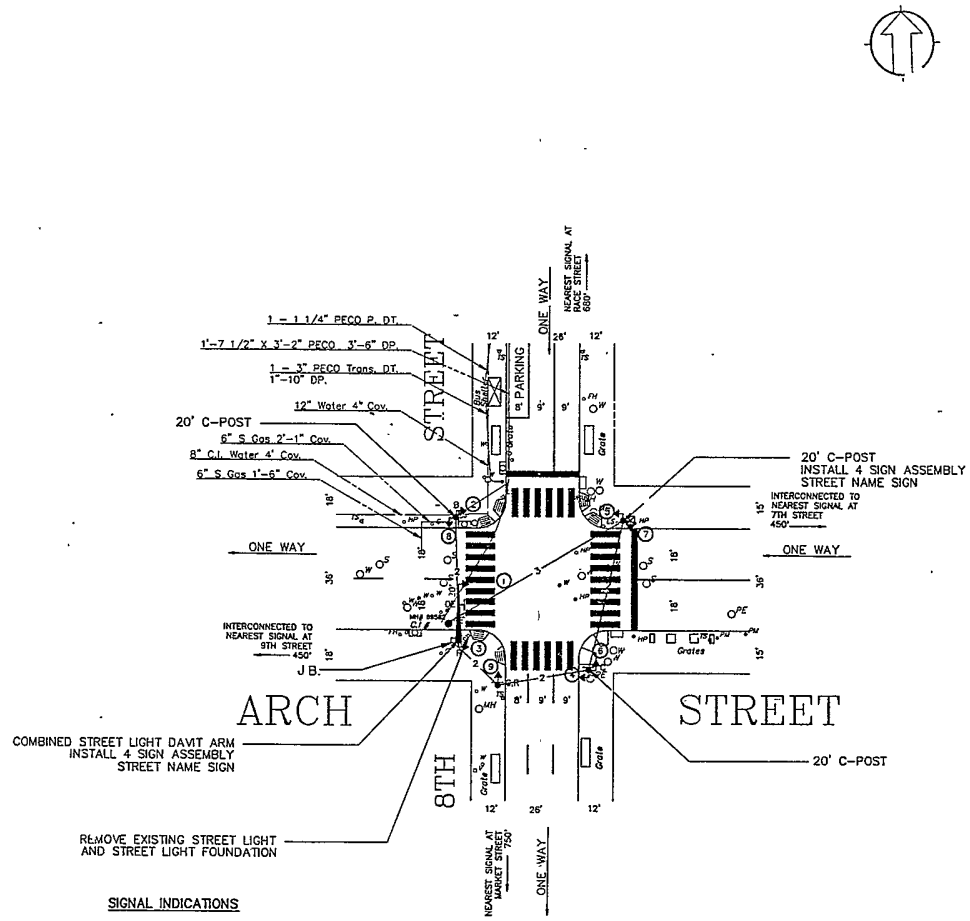
Event	Day	Time	Cycle	Plan	Offset	Remarks
1	1-7	0:00	60	3	0	

Instructions: Install timings.

TE SHOP



WALNUT
ST.
W. WASHINGTON SQUARE
7TH
INSTALL COMBINATION STREET NAME SIGN, 2 SIGN ASSEMBLY (R6-1/7TH ST)
INSTALL COMBINATION STREET NAME SIGN, 2 SIGN ASSEMBLY (R6-1/WALNUT ST)
RELOCATED STREET LIGHT POLE
RELOCATED PARKING SIGNS
Interconnected to Nearest Signal at 8th St. 445 feet
Interconnected to Nearest Signal at 6th St. 415 feet
INSTALL D-POLE
INSTALL CIRCULAR COMPOSITE JUNCTION BOX 3" CONDUIT TO D-POLE
INSTALL CONTROLLER (3) 3" CONDUITS TO JUNCTION BOX SERVICE FROM PECO MH # 1/9247
No Signal Within One Quarter Mile
SIGNAL INDICATIONS
WEEKLY PROGRAM CHART
SIGN TABULATION
MATERIAL LIST
LEGEND
CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM
7TH ST. & WALNUT ST.
AS-BUILT
DATE: 7-15-09
Orth-Rodgers & Associates, Inc.
TRANSPORTATION ENGINEERS AND PLANNERS



PHASING, TIMING AND COLOR SEQUENCE CHART

PHASE	A			B			
SIGNALS \ INTERVAL	1	2	3	4	5	6	FLASH
1,2,3,4,5	G	Y	R	R	R	R	Y
6,7,8,9	R	R	R	G	Y	R	R

SIGNAL GROUP

PROGRAM 1

SECONDS	25	3	25	24	3	25	60 SEC.

SIGNAL INDICATIONS

8"

R
Y
G

1,2,3,4,
5,6,7,8,9

Effective as of 10/1/95
Carr & Duff, Inc.
Bid # 3186

REVIEWED Clarence Murray DATE 8/9/93
TRAFFIC ENGINEER HOC

HIGHWAY DESIGN CENTER

APPROVED Charles Strauss
TRAFFIC ENGINEER DIVISION

DESIGN REVIEW Douglas May
PENNDOT TRAFFIC ENGINEER

MATERIAL LIST

1 EA 170 CONTROLLER, SOLID STA
160 LF TRAFFIC CONDUIT 2-INCH
75 LF TRAFFIC CONDUIT 3-INCH
8 EA CONDUIT ELBOW 2-INCH
2 EA CONDUIT ELBOW 3-INCH
3 EA TRAFFIC C-POST 20'
1 EA 20' MASTARM WITH STREET L
165 LF TRAFFIC SIGNAL CABLE 5-
200 LF TRAFFIC SIGNAL CABLE 15-
85 LF ELECTRICAL SERVICE WIRE 2 CONDUCTOR 10AWG
6 EA TRAFFIC SIGNS
2 EA STREET NAME SIGN 4 SIGN
6 EA CURB RAMPS
9 EA SIGNAL HEAD 8-INCH 3-SEC
1 EA TRAFFIC C-POST 13'
1 EA JUNCTION BOX, 12' X 18'
1 EA MASTARM FOUNDATION

LEGEND

EXISTING MAST ARM, LENGTH
NEW MAST ARM, LENGTH
EXISTING C-POST
NEW C-POST
CONTROLLER
EXISTING SIGNAL HEAD AND NUMBER
NEW SIGNAL HEAD AND NUMBER
EXISTING 2" CONDUIT
EXISTING CONDUIT AND SIZE
NEW CONDUIT AND SIZE

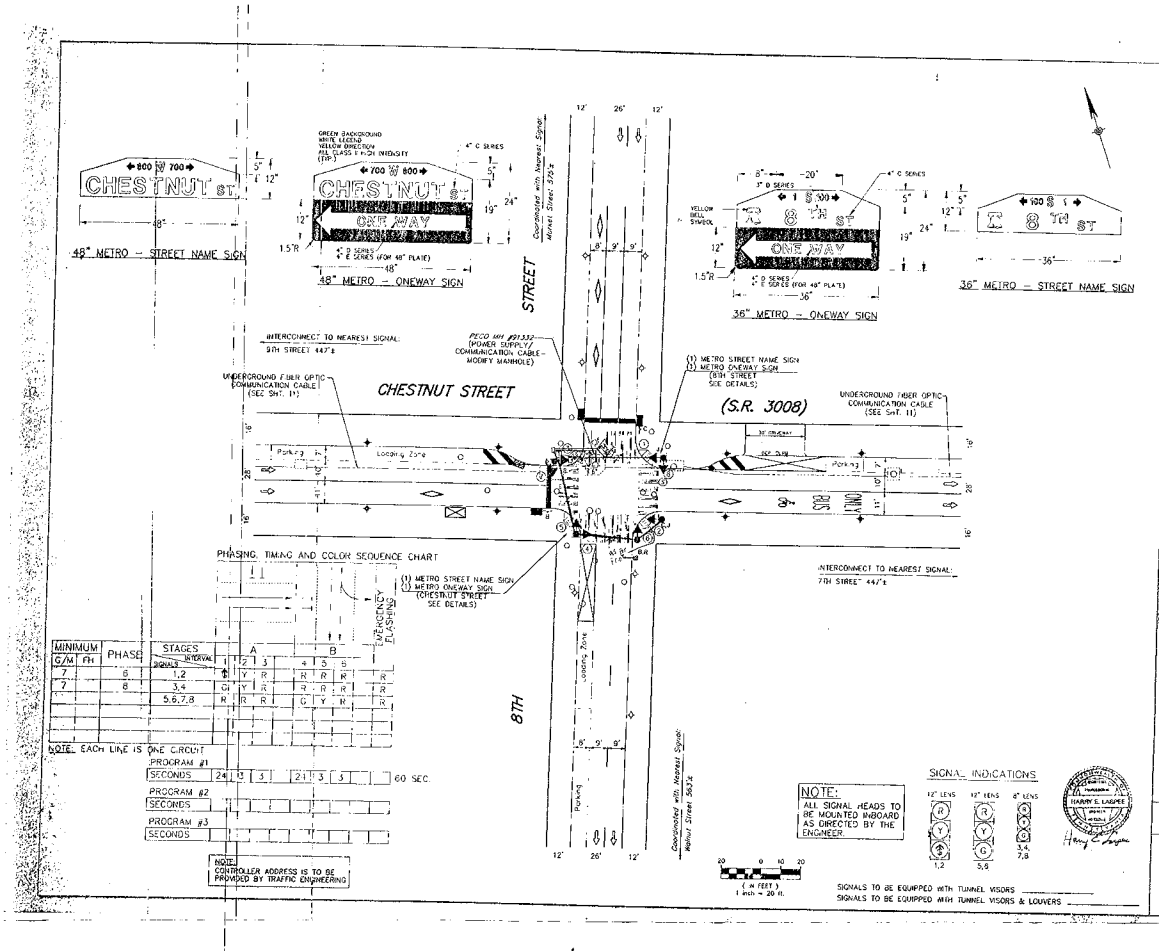
SIGN TABULATION

QUAN	SYM	SERIES	SIZE	LEG
1	B	R6-1L	36 X 12	ONE WAY LEFT ARRO
2	C	R6-1R	36 X 12	ONE WAY RIGHT ARR
2	R	R10-11	24 X 24	NO TURN ON RED
1	DE	R6-2L	30 X 36	OVERHEAD ONE WAY

CITY OF PHILADELP
TRAFFIC CONTROL SYSTE

8TH STREET
and
ARCH STREET

SHEET 18 of 43



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-5	PHILADELPHIA	3008		8 OF 11

CITY OF PHILADELPHIA

NO	REVISION	DATE

APPROVED: CITY TRAFFIC ENGINEER DATE 11/1/97

MATERIAL LIST

160	L.F.	CONDUIT, 2 INCH
55	L.F.	CONDUIT, 3 INCH
8	EACH	CONDUIT ELBOW, 2 INCH
6	EACH	CONDUIT ELBOW, 3 INCH
95	L.F.	CONDUIT TRENCH AND RESTORATION
1	EACH	TRAFFIC JUNCTION BOX, 10"x24"
2	EACH	UTILITY MANHOLE MODIFICATION
3	EACH	C-POST, 20 FT.
2	EACH	PEDESTAL POLE (SW & NW CORNERS)
4	EACH	SIGNAL HEAD, 12 INCH, 3 SECTION
4	EACH	SIGNAL HEAD, 8 INCH, 3 SECTION
1	EACH	CONTROLLER, TYPE 170, POLE MOUNTED
160	L.F.	SIGNAL CABLE, 5 CONDUCTOR
90	L.F.	SIGNAL CABLE, 15 CONDUCTOR
40	L.F.	ELECTRICAL SERVICE WIRE
1	EACH	CONNECTION OF ELECTRICAL SERVICE CABLE
1	INT.	REMOVE EXISTING SIGNAL EQUIPMENT
6	EACH	TRAFFIC SIGN – POST MOUNTED
1	EACH	36" METRO STREET NAME SIGN
1	EACH	48" METRO STREET NAME SIGN
1	EACH	36" METRO ONEWAY SIGN
1	EACH	48" METRO ONEWAY SIGN

LEGEND

- New Mast Arm, Length
- Existing C-Post
- New C-Post
- Controller
- Junction Box
- New Signal Head/Backplate
- Add Number
- New Conduit and Size
- Pedestrian Signal Head/Number
- Pedestrian Pushbutton/Sign
- Curb ramp
- Utility Pole
- Detector Number
- Support Number
- Proposed Street Light
- Direction Arrow

SIGN TABULATION

QUANT	SYM	SERIES	SIZE	LEGEND
2	B	R6-1L	36"x12"	HORIZONTAL LEFT ONE WAY
2	C	R6-1R	36"x12"	HORIZONTAL RIGHT ONE WAY
2	J	R3-3	24"x24"	NO TURNS
1	R	R10-11	24"x30"	NO TURN ON RED

CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

PROPOSED IMPROVEMENTS FOR

8TH STREET AND CHESTNUT STREET (S.R. 3008)

16037

DIST	COUNTY	ROUTE	SECT	SHEET
6-0	PHILADELPHIA			6 of 43

CITY OF PHILADELPHIA

REVISION NUMBER	REVISIONS	DATE	BY

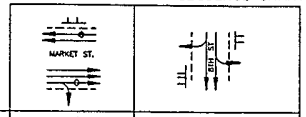
APPROVED Charles R Traeman DATE 10/1/93
TRAFFIC ENGINEER DIVISION

DESIGN REVIEW Douglas May DATE 10/25/93
PENNDOT TRAFFIC ENGINEER EA

MATERIAL LIST

QUANTITY/UNIT		DESCRIPTION
1	EA	170 CONTROLLER, SOLID STATE
1	EA	RENEW SPLICES
2	EA	TRAFFIC C-POST 20'
4	EA	PED HEAD 9-INCH 2-SECTION
30	LF	ELECTRICAL SERVICE WIRE
2	EA	SIGNAL HEAD, 8-INCH, 3-SECTION
1	EA	SIGNAL HEAD, 12-INCH, 3-SECTION
85	LF	TRAFFIC SIGNAL CABLE, 5-CONDUCTOR
1	EA	TRAFFIC SIGNS

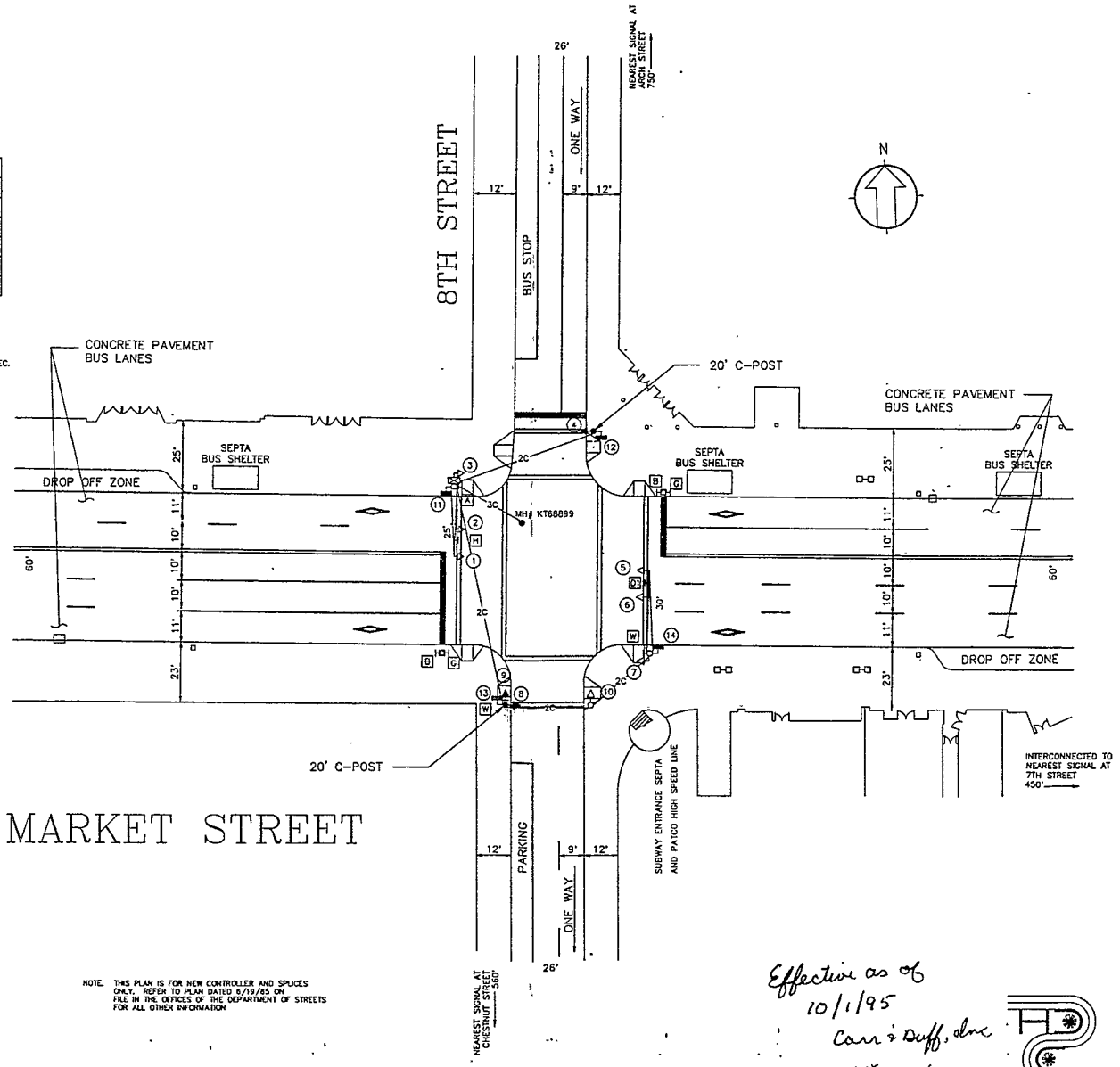
PHASING, TIMING AND COLOR SEQUENCE CHART



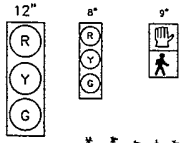
PHASE	A			B				
SIGNALS \ INTERVAL	1	2	3	4	5	6	7	FLASH
1,2,3,4	G	Y	R	R	R	R	R	Y
5,6,7,8	G	Y	R	R	R	R	R	Y
9,10	R	R	R	G	G	Y	R	R
11,12,13,14	DW	DW	DW	W	FDW	DW	DW	–

PROGRAM 1

SECONDS	30	3	3	10	8	3	3	60 SEC.



SIGNAL INDICATIONS



1,2,5,6 9,10 3,4,7,8 11,12,13,14

* INDICATES NEW SIGNAL

NOTE. THIS PLAN IS FOR NEW CONTROLLER AND SPLICES ONLY. REFER TO PLAN DATED 6/19/85 ON FILE IN THE OFFICES OF THE DEPARTMENT OF STREETS FOR ALL OTHER INFORMATION

Effective as of 10/1/95
Carr & Duff, Inc
Bid #3186

HIGHWAY DESIGN CENTER

REVIEWED [signature] DATE 9/29/93

LEGEND

	EXISTING MAST ARM, LENGTH		NEW CURB RAMP
	NEW MAST ARM, LENGTH		EXISTING CURB RAMP
	EXISTING C-POST		EXISTING TREE
	NEW C-POST		EXISTING GRATE INLET
	CONTROLLER		EXISTING INLET
	EXISTING SIGNAL HEAD AND NUMBER		EXISTING STREET LIGHT
	NEW SIGNAL HEAD AND NUMBER		NEW STREET LIGHT
–C–	EXISTING 2" CONDUIT	FH	EXISTING FIRE HYDRANT
–3C–	EXISTING CONDUIT AND SIZE		EXISTING MAIL BOX
–2–	NEW CONDUIT AND SIZE	–A	SIGN & SYMBOL

SIGN TABULATION

QUAN	SYM	SERIES	SIZE	LEGEND
0	A	R6-2L	24 X 30	ONE WAY - LEFT
0	B	R6-2R	24 X 30	ONE WAY - RIGHT
0	D1	R6-2R	30 X 36	ONE WAY - RIGHT
0	G	R3-3	24 X 24	NO TURNS
0	H	R3-3	36 X 36	NO TURNS
1	W	R10-11	24 X 30	NO TURN ON RED

CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

8TH STREET
and
MARKET STREET

WORK ORDER S11191	8th Street and Race Street				Traffic Engineering District #1
SIGNAL	Prepared by Smil Cail	Date 07/07/11	WORK COMPLETED by Jeffrey Venzale	Date 12/13/2011	Release date 12/14/2011
	Approved by C Dunn	Date 7/8/11	INSPECTED by	Date	

#	Phase Movements	1	2	3	4	5	6	7	8	Flash	Minimums G	Minimums M	Minimums FH	Extension	Maximums G	Maximums M	Maximums FH
		4+P8				6+P6											
2																	
5																	
6	SB 8th Street	R	R	R	R	G	G	Y	R	R							
1																	
4	EB Race Street	G	G	Y	R	R	R	R	R	Y							
7																	
8																	
3																	
P2																	
P6	West side crosswalk	H	H	H	H	M	FH	H	H	OFF							
P4																	
P8	North side crosswalk	M	FH	H	H	H	H	H	H	OFF							

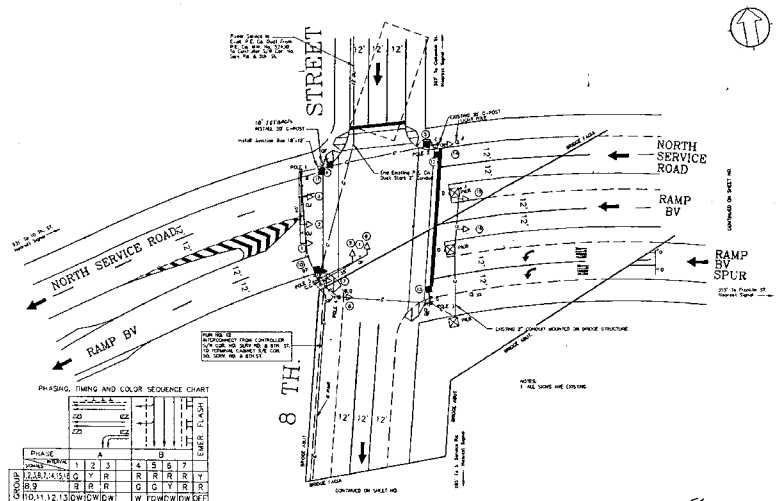
Program 1	11	13	3.7	2.3	12	12	3.4	2.6	60	secs	
Program 2	11	13	3.7	2.3	12	12	3.4	2.6	60	secs	
Program 3	11	13	3.7	2.3	12	12	3.4	2.6	60	secs	

Time of Day Plan

Event	Day	Time	Cycle	Plan	Offset	Remarks
1	1-7	0:00	60	3	45	

Instructions: Install timings.

TE SHOP



PHASING, TIMING AND COLOR SEQUENCE CHART

PHASE	A			B				EMER FLASH
SIGNAL GROUP	1	2	3	4	5	6	7	
1,2,3,8,9,14,15,16	G	Y	R	R	R	R	R	Y
8,9	R	R	R	G	G	Y	R	R
10,11,12,13	DW	DW	DW	W	DW	DW	DW	OFF
4,5	W	DW	DW	DW	DW	DW	DW	OFF
FIXED		3 5	2 0			3 5	3 0	
MINIMUM	27			7.0				
PASSAGE				1.0				
MAXIMUM				27				
PEDESTRIAN				10	17			
MEMORY								
PROGRAM	51	3 5	2 0	10	17	3 5	3 0	

SIGNAL INDICATIONS

Effective as of 10/1/95
Con & Diff
Bid # 3186

APPROVED
DESIGN REVIEW
PLANNER
TRAFFIC ENGINEER

MATERIAL LIST

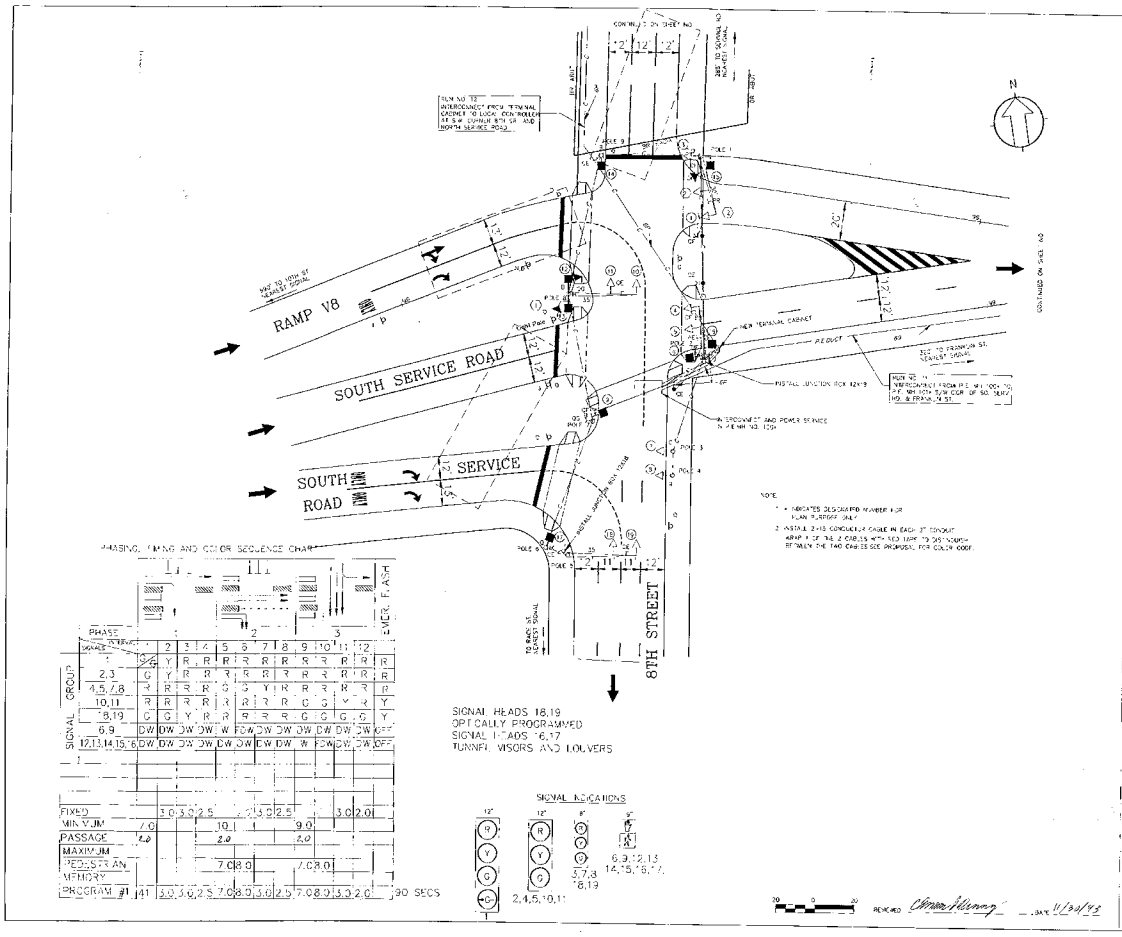
1	EA	170 SOLID STATE CONTRC
20	LF	TRAFFIC CONDUIT 2-INCH
2	EA	CONDUIT ELBOW 2-INCH
1	EA	TRAFFIC C-POST 20'
2	EA	SIGNAL HEAD 9-INCH, 2- (HAND / MAN)
4	EA	SIGNAL HEAD 12-INCH, 2 (HAND / MAN)
20	LF	TRAFFIC SIGNAL CABLE 1
140	LF	TRAFFIC SIGNAL CABLE 5
60	LF	ELECTRICAL SERVICE WIRE 2-CONDUCTOR 10AWG
4	EA	TRAFFIC SIGNS
1	EA	JUNCTION BOX 12"X18"
4	EA	PEDESTRIAN PUSH BUTTO
1	EA	MICROWAVE DETECTORS
1	LS	RENEW SPLICES
30	LF	COMMUNICATION CABLE 1/

LEGEND

SIGN TABULATION

CITY OF PHILADEL
TRAFFIC CONTROL SYSTE

(L.R.67045) NORTH SERVICE
RAMP BV AND RAMP BV
8 TH STREET



DIST.	COUNTY	ROUTE	SEC.	SHEET
6-0	PHILADELPHIA			43C of 43

CITY OF PHILADELPHIA

REVISION — DATE

APPROVED — DATE 12.1.93

DESIGN REVIEW — DATE 12/1/93

MATERIAL LIST

1	EA	170 SOLID STATE CONTROLLER
30	LF	TRAFFIC CONDUIT 2-INCH
2	EA	CONDUIT ELBOW 2-INCH
2	EA	CONDUIT ELBOW 3-INCH
3	EA	TRAFFIC SIGNAL POST 13'
8	EA	SIGNAL HEAD 12-INCH, 3-SECTION (HAND / MAN)
400	LF	TRAFFIC SIGNAL CABLE 5-CONDUCTOR
220	LF	TRAFFIC SIGNAL CABLE 5 CONDUCTOR
80	LF	ELECTRICAL SERVICE WIRE 7-CONDUCTOR 10AWG
10	EA	TRAFFIC SIGNS
2	EA	JUNCTION BOX 12"X18"
1	EA	COMMUNICATION TERMINAL CABINET
10	EA	PEDESTRIAN PUSH BUTTON
3	EA	MICROWAVE DETECTORS
360	LF	COMMUNICATION CABLE 12 PAIR

LEGEND

Existing Mast Arm, Length
New Mast Arm, Length
Existing C-Post
New C-Post
Controller
Existing Signal Head And Number
New Signal Head And Number
Pedestrian Signal Head And Number
Existing 2" Conduit
Existing Conduit To Be Paused
New Conduit and Size
New Handicap Ramp
Existing Ramp
Existing Grate Inlet
Existing Inlet
Existing Mast Arm
Existing Bus Turnout
Structure Mounted Sign Identifying Letter
Post Mounted Sign Identifying Letter
Pedestrian Push Button
Microwave Detector

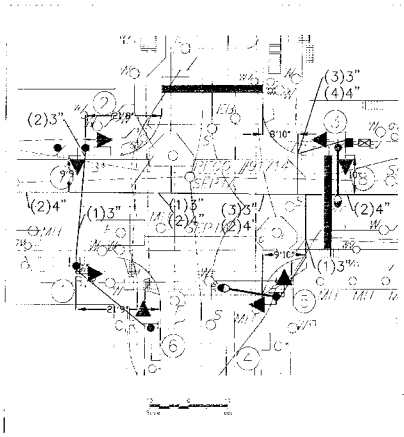
SIGN TABULATION

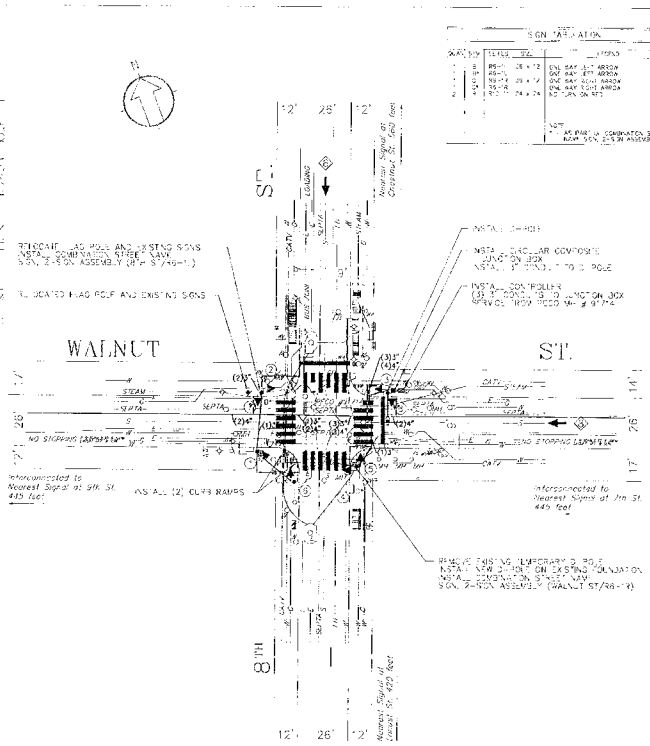
QUAN.	SYM.	SERIES	SIZE	LEGEND
	OE	R6-2L	30X36	ONE WAY
	D	R5-1	24X12	DO NOT ENTER
	D	R3-3	18X18	NO PEDESTRIAN SIGN
	Y	R3-18	24X24	RIGHT LANE MUST TURN RIGHT
	D	R5-1R	36X12	DO NOT ENTER
	R	W3-1T	24X12	NO TURN ON RED
	R	R3-1	30X30	NO TURN ON RED
	R	R10-2	24X30	WAIT FOR GREEN
	OE	R6-2R	30X36	ONE WAY
	D	R5-1	18X12	DO NOT ENTER
		R3-5	24X24	NO SIGNS ON
4	OE	R10-4R	9"X12"	PUSH BUTTON FOR WALK SIGNAL RA
4	OE	R10-4L	9"X12"	PUSH BUTTON FOR WALK SIGNAL LA
2	OE	R10-4R	9"X12"	PUSH BUTTON FOR WALK SIGNAL LA

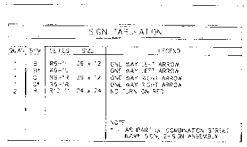
CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

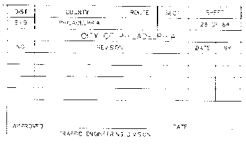
(LR.67045) SOUTH SERVICE ROAD AND RAMP V8 AT 8TH STREET

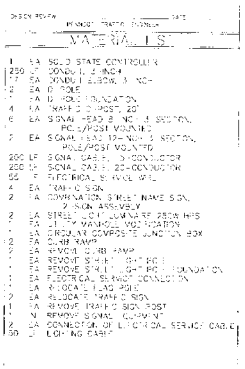
Sheet 43C of 43

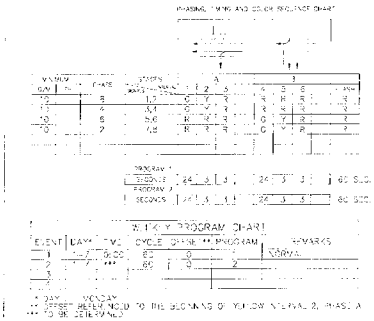


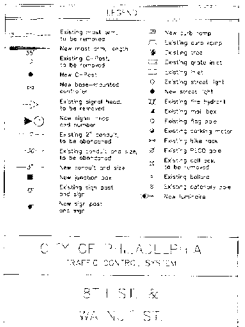












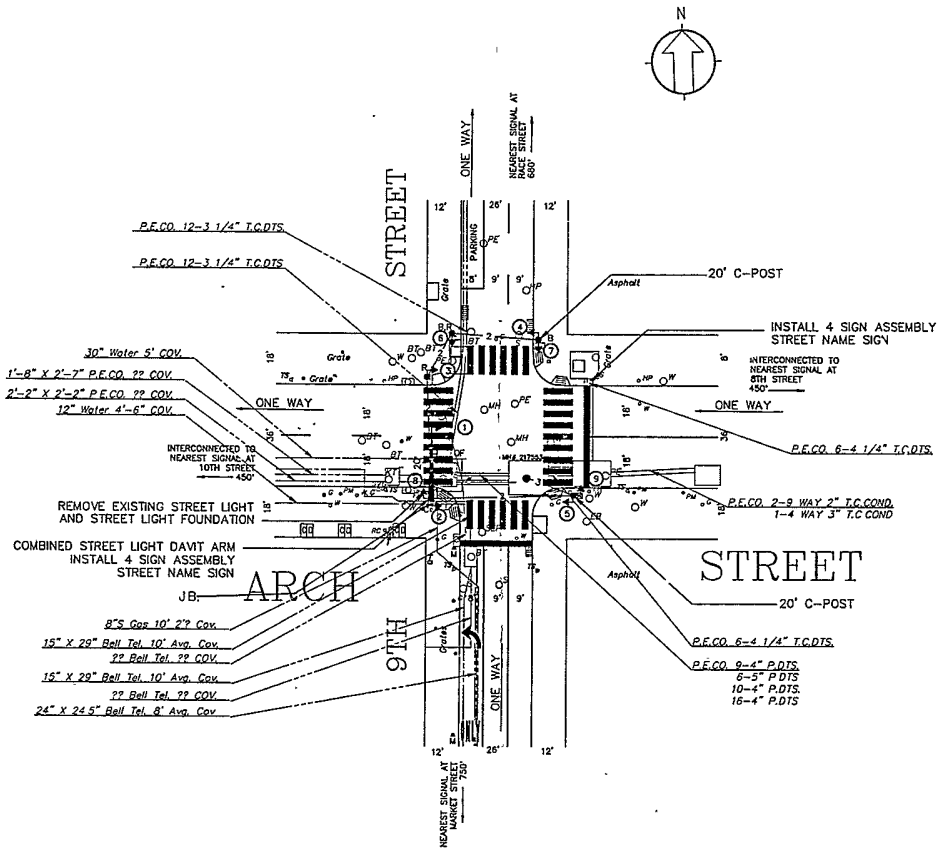
AS-BUILT

DATE: 7-15-09

OR&A Orth-Rodgers & Associates, Inc.

CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

8TH ST. &
WALNUT ST.



PHASING, TIMING AND COLOR SEQUENCE CHART

SIGNAL GROUP	PHASE	A			B			
	INTERVAL / SIGNALS	1	2	3	4	5	6	FLASH
	1,2,3,4,5	G	Y	R	R	R	R	Y
	6,7,8,9	R	R	R	G	Y	R	R

PROGRAM 1

SECONDS	25	3	2.5	24	3	2.5	60 SEC.

SIGNAL INDICATIONS

8"

R
Y
G

1,2,3,4,5
6,7,8,9

20 0 20
Scale Feet

Effective as of 10/1/95
Carr & Duff, Inc.
Bid # 3186

REVIEWED [signature] TRAFFIC ENGINEER HDC DATE 8/9/95

HIGHWAY DESIGN CENTER

APPROVED [signature] TRAFFIC ENGINEER DIVISION

DESIGN REVIEW [signature] PENNDOT TRAFFIC ENGINEER

MATERIAL LIST

1 EA 170 CONTROLLER, SOLID STA
160 LF TRAFFIC CONDUIT 2-1 CH
25 LF TRAFFIC CONDUIT 3-1 CH
8 EA CONDUIT ELBOW 2-INCH
2 EA CONDUIT ELBOW 3-INCH
2 EA TRAFFIC C-POST 20'
2 EA TRAFFIC C-POST 13'
165 LF TRAFFIC SIGNAL CABLE 5-C
200 LF TRAFFIC SIGNAL CABLE 15-
30 LF ELECTRICAL SERVICE WIRE 2 CONDUCTOR 10AWG
8 EA TRAFFIC SIGNS
2 EA STREET NAME SIGN 4 SIGN
5 EA CURB RAMPS
9 EA SIGNAL HEAD 8-INCH 3-SEC
1 EA 20' MASTARM WITH STREET L
1 EA MAST ARM FOUNDATION
1 EA JUNCTION BOX, 12" X 18'

LEGEND

35'	EXISTING MAST ARM, LENGTH		NEW
35'	NEW MAST ARM, LENGTH		EXI
	EXISTING C-POST		EXI
	NEW C-POST		EXI
	CONTROLLER		EXI
	EXISTING SIGNAL HEAD AND NUMBER		EXI
	NEW SIGNAL HEAD AND NUMBER		NEW
-C-	EXISTING 2" CONDUIT	FH	EXI
-3C-	EXISTING CONDUIT AND SIZE		EXI
-2-	NEW CONDUIT AND SIZE	-A	SIG

SIGN TABULATION

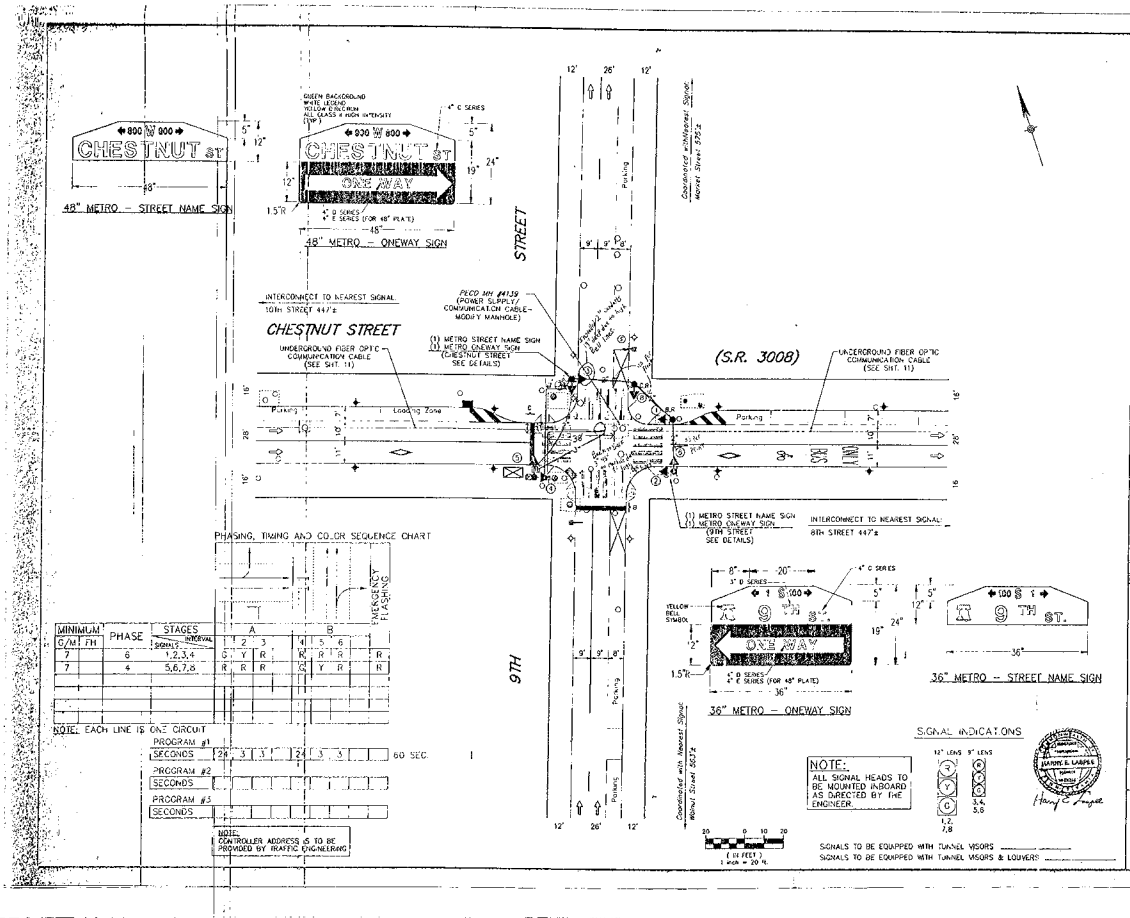
QUAN	SYM	SERIES	SIZE	LEGEND
2	B	R6-1L	36 X 12	ONE WAY LEFT ARROW
1	C	R6-1R	36 X 12	ONE WAY RIGHT ARRO
2	R	R10-11	24 X 24	NO TURN ON RED
2	H	R3-7L	30 X 30	LEFT LANE MUST TURN
1	DF	R6-2R	30 X 36	ONE WAY RIGHT ARRO

CITY OF PHILADELP

TRAFFIC CONTROL SYSTEM

9TH STREET and ARCH STREET

SHEET 19 of 43



DISTRICT	COUNTY	ROUTE	SECTION	SHEET
0-3	PHILADELPHIA	3008		7 OF 11

CITY OF PHILADELPHIA

NO.	REVISION	DATE

APPROVED [signature] CITY TRAFFIC ENGINEER DATE 1/16/98

MATERIAL LIST

160	L.F.	CONDUIT, 2 INCH
55	L.F.	CONDUIT, 3 INCH
8	EACH	CONDUIT ELBOW, 2 INCH
6	EACH	CONDUIT ELBOW, 3 INCH
95	L.F.	CONDUIT TRENCH AND RESTORATION
1	EACH	TRAFFIC JUNCTION BOX, 18"x24"
2	EACH	UTILITY MANHOLE MODIFICATION
3	EACH	C-POST, 20 FT.
2	EACH	PEDESTAL POLE (SW & NW CORNERS)
4	EACH	SIGNAL HEAD, 12 INCH, 3 SECTION
4	EACH	SIGNAL HEAD, 8 INCH, 3 SECTION
1	EACH	CONTROLLER, TYPE 170, POLE MOUNTED
140	L.F.	SIGNAL CABLE, 5 CONDUCTOR
90	L.F.	SIGNAL CABLE, 15 CONDUCTOR
40	L.F.	ELECTRICAL SERVICE WIRE
1	EACH	CONNECTION OF ELECTRICAL SERVICE CABLE
1	N.T.	REMOVE EXISTING SIGNAL EQUIPMENT
6	EACH	TRAFFIC SIGN – POST MOUNTED
1	EACH	48" METRO STREET NAME SIGN
1	EACH	36" METRO STREET NAME SIGN
1	EACH	36" METRO ONEWAY SIGN
1	EACH	48" METRO ONEWAY SIGN

LEGEND

33	New Mast Arm, Length		Curb Ramp
○	Existing C-Post		Utility Pole
●	New C-Post		Detector Number
	Controller		Support Number
	Junction Box		Proposed Signal Unit
	New Signal Head/Backplate		Direction Arrow
	Aid Junction		
	New Conduit and Size		
	Pedestrian Signal Head/Number		
	Pedestrian Pushbutton/Sign		

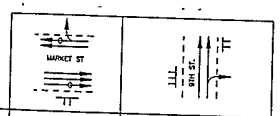
SIGN TABULATION

QUAN	SYM	SERIES	SIZE	LEGEND
2	B	R8-1L	36"x12"	HORIZONTAL LEFT ONE WAY
2	C	R8-1R	36"x12"	HORIZONTAL RIGHT ONE WAY
2	R	R10-11	24"x30"	NO TURN ON RED

CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

PROPOSED IMPROVEMENTS FOR
9TH STREET
AND
CHESTNUT STREET
(S.R. 3008)

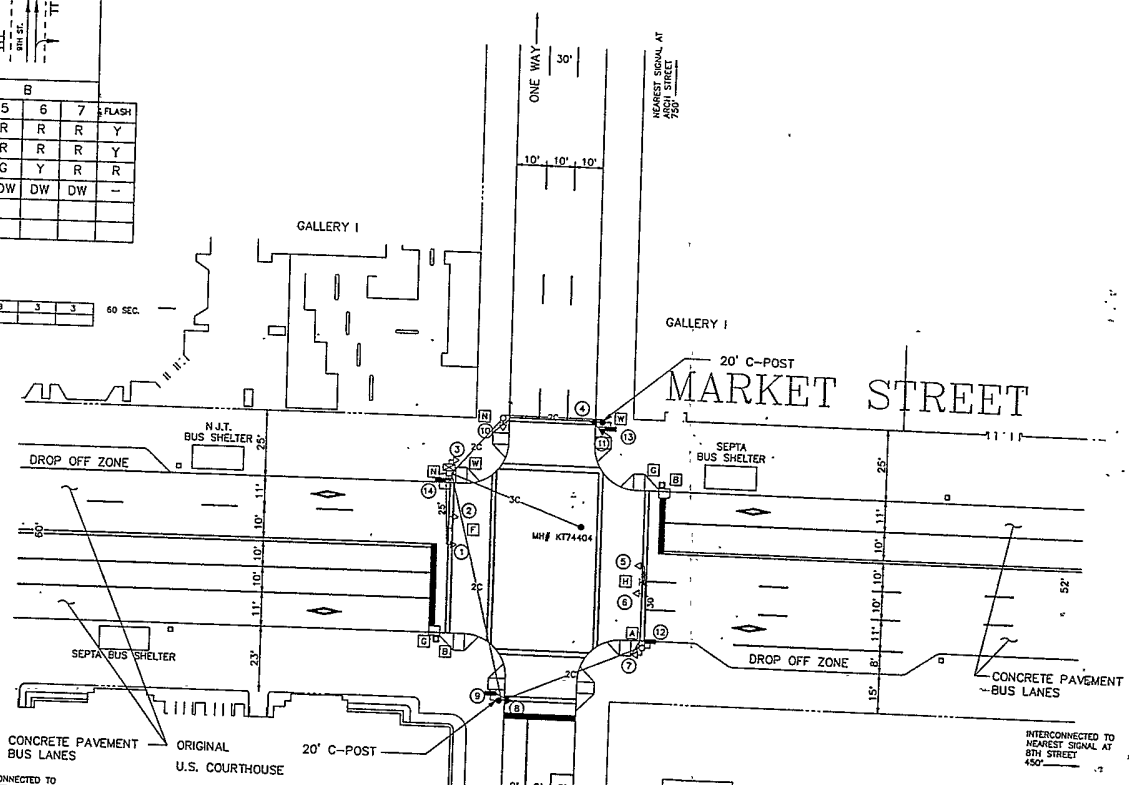
RHST 7989.008.C0 T2008 9/16/98



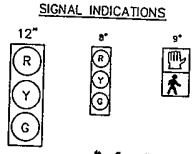
SIGNAL GROUP	PHASE	A			B				
	SIGNALS / INTERVAL	1	2	3	4	5	6	7	FLASH
	1,2,3,4	G	Y	R	R	R	R	R	Y
	5,6,7,8	G	Y	R	R	R	R	R	Y
	10,11	R	R	R	G	G	Y	R	R
	9,12,13,14	DW	DW	DW	W	FDW	DW	DW	–

PROGRAM 1

SECONDS	30	3	3	10	8	3	3	60 SEC.



SIGNAL INDICATIONS



INDICATES NEW SIGNAL

NOTE: THIS PLAN IS FOR NEW CONTROLLER AND SPLICES ONLY. REFER TO PLAN DATED 6/19/85 ON FILE IN THE OFFICES OF THE DEPARTMENT OF STREETS FOR ALL OTHER INFORMATION

Effective as of 10/1/95
Carr & Duff, dra
Bid# 3186

REVIEWED [signature] TRAFFIC ENGINEER-HDC DATE 7/24/95

HIGHWAY DESIGN CENTER

APPROVED [signature] TRAFFIC ENGINEER DIVISION

DESIGN REVIEW [signature] PENNDOT TRAFFIC ENGINEER

MATERIAL LIST

QUANTITY/UNIT	DESCRIPTION
1 EA.	170 CONTROLLER, SOLID STATE
1 EA.	RENEW SPLICES
2 EA.	TRAFFIC C-POST, 20'
4 EA	PED HEAD 9-INCH 2-SECTION
2 EA.	SIGNAL HEAD 8 INCH 3-SECT
50 LF	ELECTRICAL SERVICE WIRES
1 EA	SIGNAL HEAD 12 INCH 3 SECT
85 LF	TRAFFIC SIGNAL CABLE 5-60
1 EA	TRAFFIC SIGNS

LEGEND

- EXISTING MAST ARM LENGTH
- NEW MAST ARM LENGTH
- EXISTING C-POST
- NEW C-POST
- CONTROLLER
- EXISTING SIGNAL HEAD AND NUMBER
- NEW SIGNAL HEAD AND NUMBER
- EXISTING 2" CONDUIT
- EXISTING CONDUIT AND SIZE
- NEW CONDUIT AND SIZE

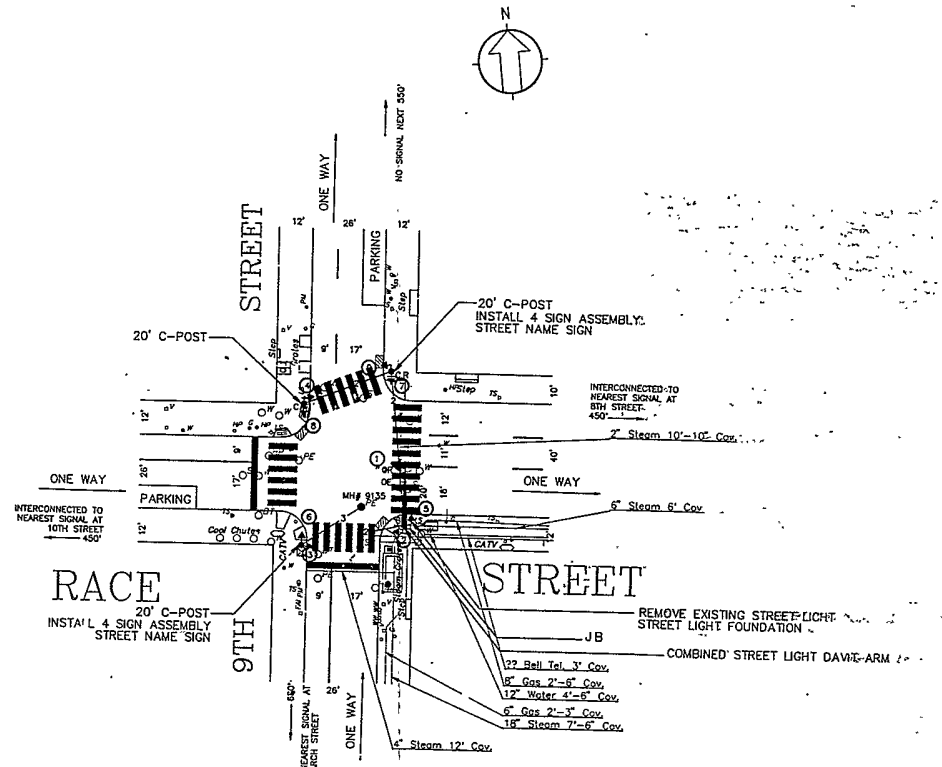
SIGN TABULATION

QUANT	SYM	SERIES	SIZE	LEGEND
0	A	R6-2L	24 X 30	ONE WAY - LEFT
0	B	R6-2R	24 X 30	ONE WAY - RIGHT
0	F	R6-2R	36 X 36	ONE WAY - RIGHT
0	G	R3-3	24 X 24	NO TURNS
0	H	R3-3	36 X 36	NO TURNS
0	N	R3-2	24 X 24	NO LEFT TURN
1	W	R10-11	24 X 30	NO TURN ON RED

CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

9TH STREET and MARKET STREET

SHEET 7 of 43



PHASING, TIMING AND COLOR SEQUENCE CHART

PHASE	A			B			
INTERVAL / SIGNALS	1	2	3	4	5	6	FLASH
SIGNAL GROUP 1,2,3,4,9	G	Y	R	R	R	R	Y
SIGNAL GROUP 5,6,7,8	R	R	R	G	Y	R	R

PROGRAM 1

SECONDS	25	3	2.5	24	3	2.5	60 SEC.

SIGNAL INDICATIONS

8"

R Y G

1,2,3,4
5,6,7,8,9

Effective as of 10/1/95
Cars + Diff. dir.
Bid # 3186

REVIEWED: Chas. Pilling — TRAFFIC ENGINEER HDC — DATE: 8/4/95

REVISION NUMBER	REVISIONS

APPROVED: Charles Fraunfelter — TRAFFIC ENGINEER DESIGN

DESIGN REVIEW: Douglas May — PENNDOT TRAFFIC ENGINEER

MATERIAL LIST

1 EA 170 CONTROLLER, SOLID STA
130 LF TRAFFIC CONDUIT 2-INCH
30 LF TRAFFIC CONDUIT 3-INCH
6 EA CONDUIT ELBOW 2-INCH
2 EA CONDUIT ELBOW 3-INCH
3 EA TRAFFIC C-POST 20'
165 LF TRAFFIC SIGNAL CABLE 5
160 LF TRAFFIC SIGNAL CABLE 18
95 LF ELECTRICAL SERVICE WIRE 2 CONDUCTOR 10 AWG
6 EA TRAFFIC SIGNS
24 EA STREET NAME SIGNS
2 EA CURB RAMPS
9 EA SIGNAL HEAD 8-INCH 3-SECTION
1 EA 20' MAST ARM
1 EA MAST ARM FOUNDATIONS
11 EA JUNCTION BOX 12" X 18"

LEGEND

EXISTING MAST ARM LENGTH
NEW MAST ARM LENGTH
EXISTING C-POST
NEW C-POST
CONTROLLER
EXISTING SIGNAL HEAD AND NUMBER
NEW SIGNAL HEAD AND NUMBER
EXISTING 2" CONDUIT
EXISTING CONDUIT AND SIZE
NEW CONDUIT AND SIZE

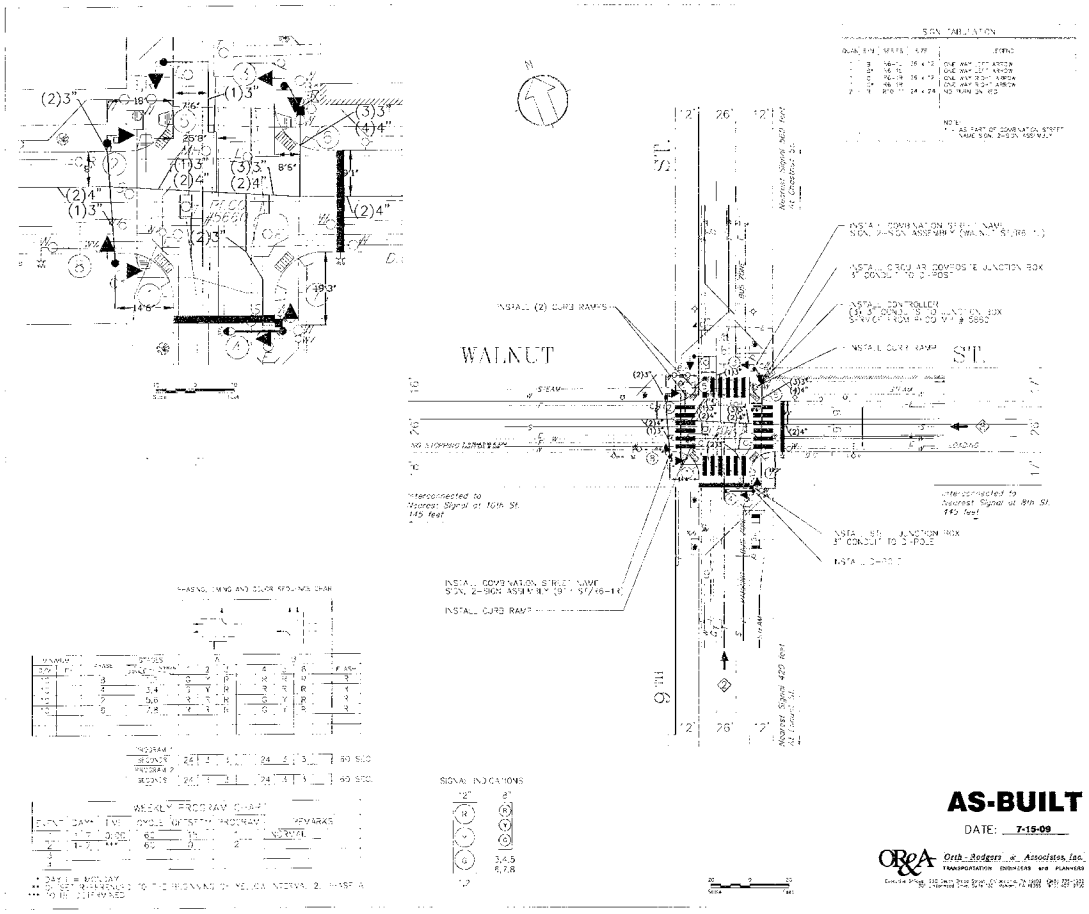
SIGN TABULATION

QUAN	STM	SERIES	SIZE	LEGE
1	B	R6-1L	36 X 12	ONE WAY LEFT ARROW
2	C	R6-1R	36 X 12	ONE WAY RIGHT ARROW
1	R	R10-11	24 X 24	NO TURN ON RED
1	OR	R6-2L	30 X 12	ONE WAY LEFT ARROW
1	OR	R10-11	24 X 30	NO TURN ON RED

CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

9TH STREET and RACE STREET

SHEET 30 of 43


WALNUT
ST.
SIGN TABULATION
PHASING, TIMING AND COLOR SEQUENCE CHART
WEEKLY PROGRAM CHART
SIGNAL INDICATIONS
AS-BUILT
DATE: 7-15-09
Orth-Rodgers & Associates, Inc.
TRANSPORTATION ENGINEERS AND PLANNERS
CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM
9TH ST. &
WALNUT ST.

16037

DIST	COUNTY	ROUTE	SECT	SHEET
6-0	PHILADELPHIA			6 of 43

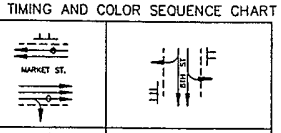
CITY OF PHILADELPHIA

REVISION NUMBER	REVISIONS	DATE	BY

APPROVED Charles R Traeman DATE 10/1/93
TRAFFIC ENGINEER DIVISION

DESIGN REVIEW Douglas May DATE 10/25/93
PENNDOT TRAFFIC ENGINEER EA

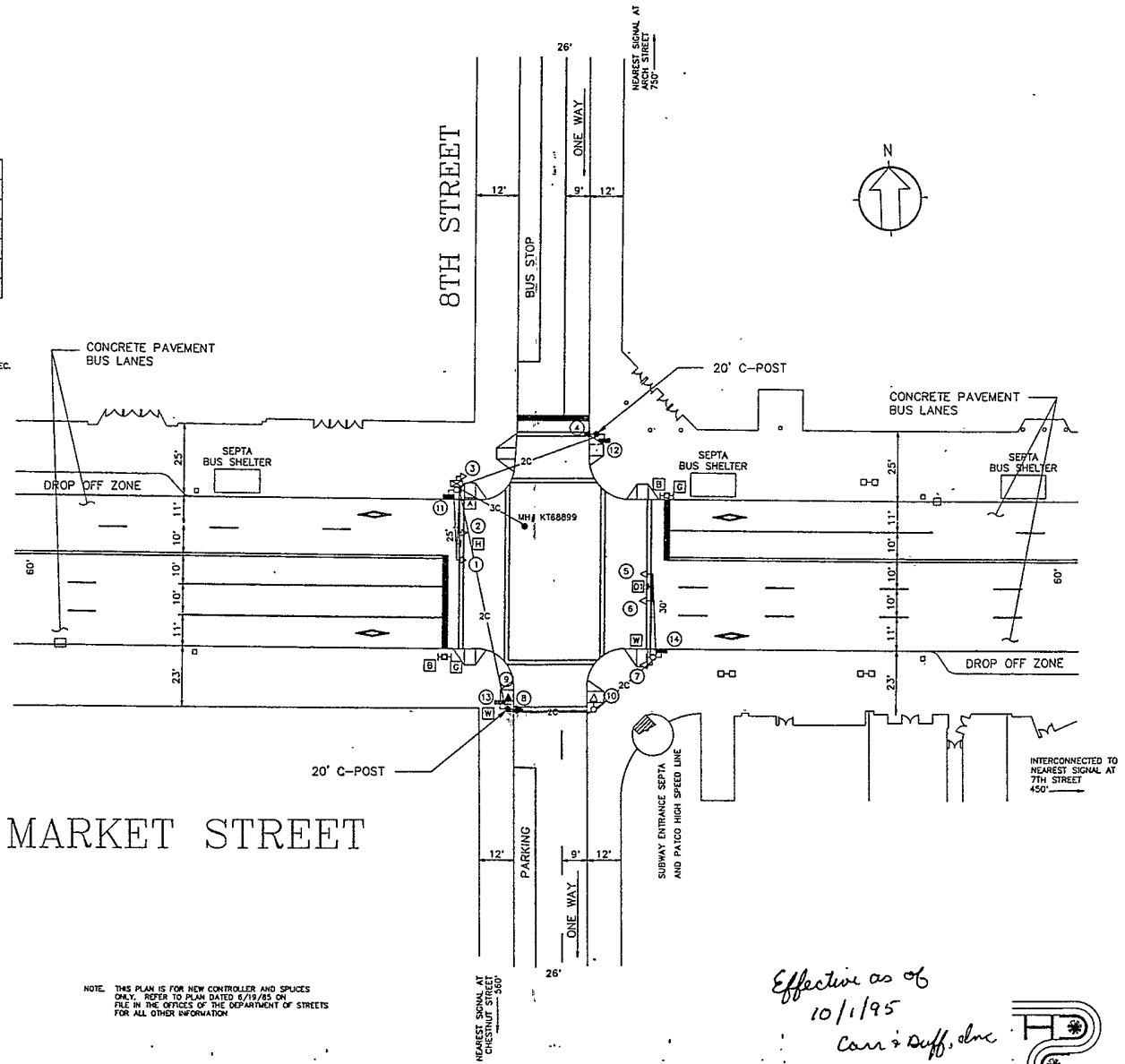
PHASING, TIMING AND COLOR SEQUENCE CHART



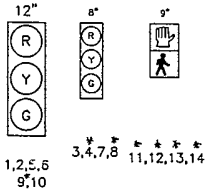
PHASE	A			B				
SIGNALS \ INTERVAL	1	2	3	4	5	6	7	FLASH
1,2,3,4	G	Y	R	R	R	R	R	Y
5,6,7,8	G	Y	R	R	R	R	R	Y
9,10	R	R	R	G	G	Y	R	R
11,12,13,14	DW	DW	DW	W	FDW	DW	DW	–

PROGRAM 1

SECONDS	30	3	3	10	8	3	3	60 SEC.



SIGNAL INDICATIONS



* INDICATES NEW SIGNAL

NOTE. THIS PLAN IS FOR NEW CONTROLLER AND SPLICES ONLY. REFER TO PLAN DATED 6/19/85 ON FILE IN THE OFFICES OF THE DEPARTMENT OF STREETS FOR ALL OTHER INFORMATION

Effective as of 10/1/95
Carr & Duff, Inc
Bid #3186

HIGHWAY DESIGN CENTER

REVIEWED [signature] DATE 9/29/93

MATERIAL LIST

QUANTITY/UNIT		DESCRIPTION
1	EA	170 CONTROLLER, SOLID STATE
1	EA	RENEW SPLICES
2	EA	TRAFFIC C-POST 20'
4	EA	PED HEAD 9-INCH 2-SECTION
30	LF	ELECTRICAL SERVICE WIRE
2	EA	SIGNAL HEAD, 8-INCH, 3-SECTION
1	EA	SIGNAL HEAD, 12-INCH, 3-SECTION
85	LF	TRAFFIC SIGNAL CABLE, 5-CONDUCTOR
1	EA	TRAFFIC SIGNS

LEGEND

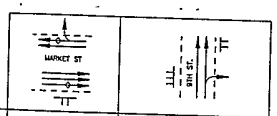
35'	EXISTING MAST ARM, LENGTH		NEW CURB RAMP
35'	NEW MAST ARM, LENGTH		EXISTING CURB RAMP
	EXISTING C-POST		EXISTING TREE
	NEW C-POST		EXISTING GRATE INLET
	CONTROLLER		EXISTING INLET
	EXISTING SIGNAL HEAD AND NUMBER		EXISTING STREET LIGHT
	NEW SIGNAL HEAD AND NUMBER		NEW STREET LIGHT
–C–	EXISTING 2" CONDUIT	FH	EXISTING FIRE HYDRANT
–3C–	EXISTING CONDUIT AND SIZE		EXISTING MAIL BOX
–2–	NEW CONDUIT AND SIZE	–A	SIGN & SYMBOL

SIGN TABULATION

QUAN	SYM	SERIES	SIZE	LEGEND
0	A	R6-2L	24 X 30	ONE WAY - LEFT
0	B	R6-2R	24 X 30	ONE WAY - RIGHT
0	D1	R6-2R	30 X 36	ONE WAY - RIGHT
0	G	R3-3	24 X 24	NO TURNS
0	H	R3-3	36 X 36	NO TURNS
1	W	R10-11	24 X 30	NO TURN ON RED

CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

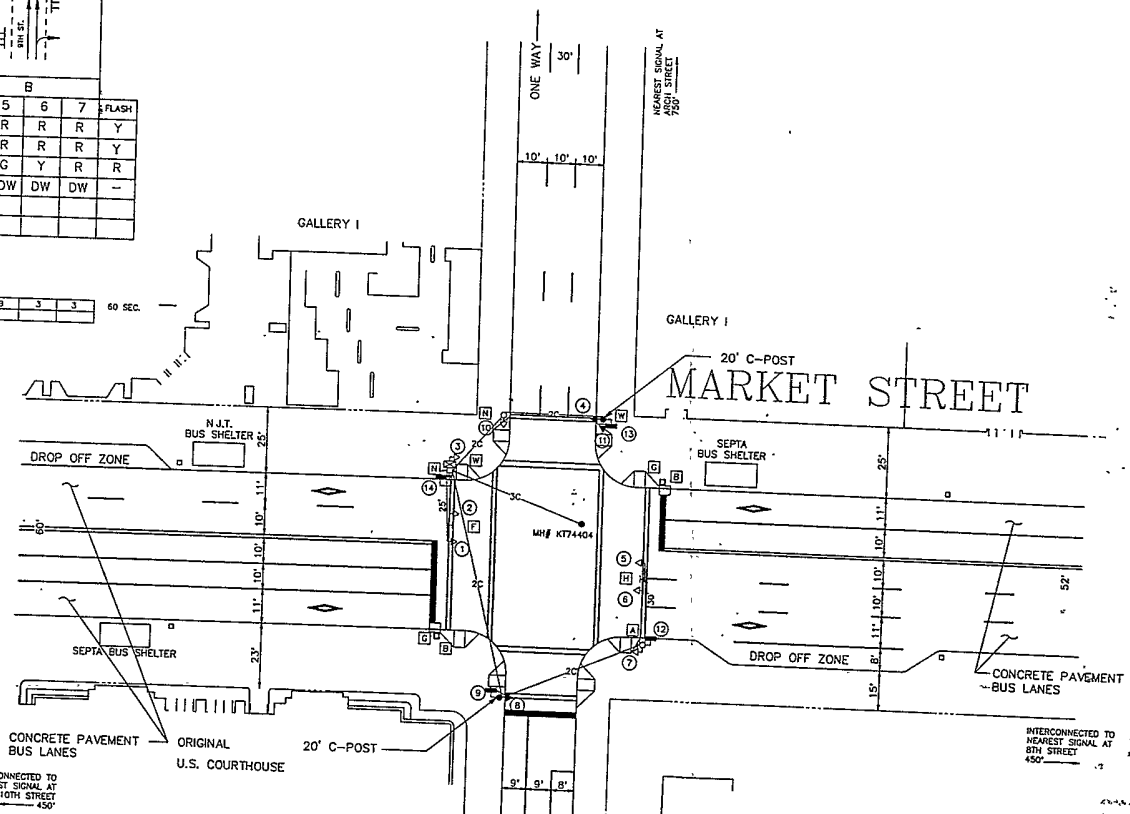
8TH STREET
and
MARKET STREET



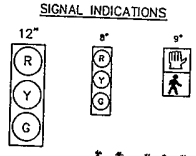
SIGNAL GROUP	PHASE	A			B				
	SIGNALS \ INTERVAL	1	2	3	4	5	6	7	FLASH
	1,2,3,4	G	Y	R	R	R	R	R	Y
	5,6,7,8	G	Y	R	R	R	R	R	Y
	10,11	R	R	R	G	G	Y	R	R
	9,12,13,14	DW	DW	DW	W	FDW	DW	DW	–

PROGRAM 1

SECONDS	30	3	3	10	8	3	3	60 SEC.



SIGNAL INDICATIONS



INDICATES NEW SIGNAL

NOTE: THIS PLAN IS FOR NEW CONTROLLER AND SPLICES ONLY. REFER TO PLAN DATED 6/19/85 ON FILE IN THE OFFICES OF THE DEPARTMENT OF STREETS FOR ALL OTHER INFORMATION

Effective as of 10/1/95
Carr & Duff, Inc.
Bid # 3186

REVIEWED [signature] TRAFFIC ENGINEER-HDC DATE 7/24/95

HIGHWAY DESIGN CENTER

APPROVED [signature] TRAFFIC ENGINEER DIVISION

DESIGN REVIEW [signature] PENNDOT TRAFFIC ENGINEER

MATERIAL LIST

QUANTITY/UNIT	DESCRIPTION
1 EA.	170 CONTROLLER, SOLID STATE
1 EA.	RENEW SPLICES
2 EA.	TRAFFIC C-POST, 20'
4 EA	PED HEAD 9-INCH 2-SECTION
2 EA.	SIGNAL HEAD 8 INCH 3-SECT
50 LF	ELECTRICAL SERVICE WIRES
1 EA	SIGNAL HEAD 12 INCH 3 SECT
85 LF	TRAFFIC SIGNAL CABLE 5-60
1 EA	TRAFFIC SIGNS

LEGEND

EXISTING MAST ARM LENGTH
NEW MAST ARM LENGTH
EXISTING C-POST
NEW C-POST
CONTROLLER
EXISTING SIGNAL HEAD AND NUMBER
NEW SIGNAL HEAD AND NUMBER
EXISTING 2" CONDUIT
EXISTING CONDUIT AND SIZE
NEW CONDUIT AND SIZE

SIGN TABULATION

QUANT	SYM	SERIES	SIZE	LEGEND
0	A	R6-2L	24 X 30	ONE WAY - LEFT
0	B	R6-2R	24 X 30	ONE WAY - RIGHT
0	F	R6-2R	36 X 36	ONE WAY - RIGHT
0	G	R3-3	24 X 24	NO TURNS
0	H	R3-3	36 X 36	NO TURNS
0	N	R3-2	24 X 24	NO LEFT TURN
1	W	R10-11	24 X 30	NO TURN ON RED

CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

9TH STREET and MARKET STREET

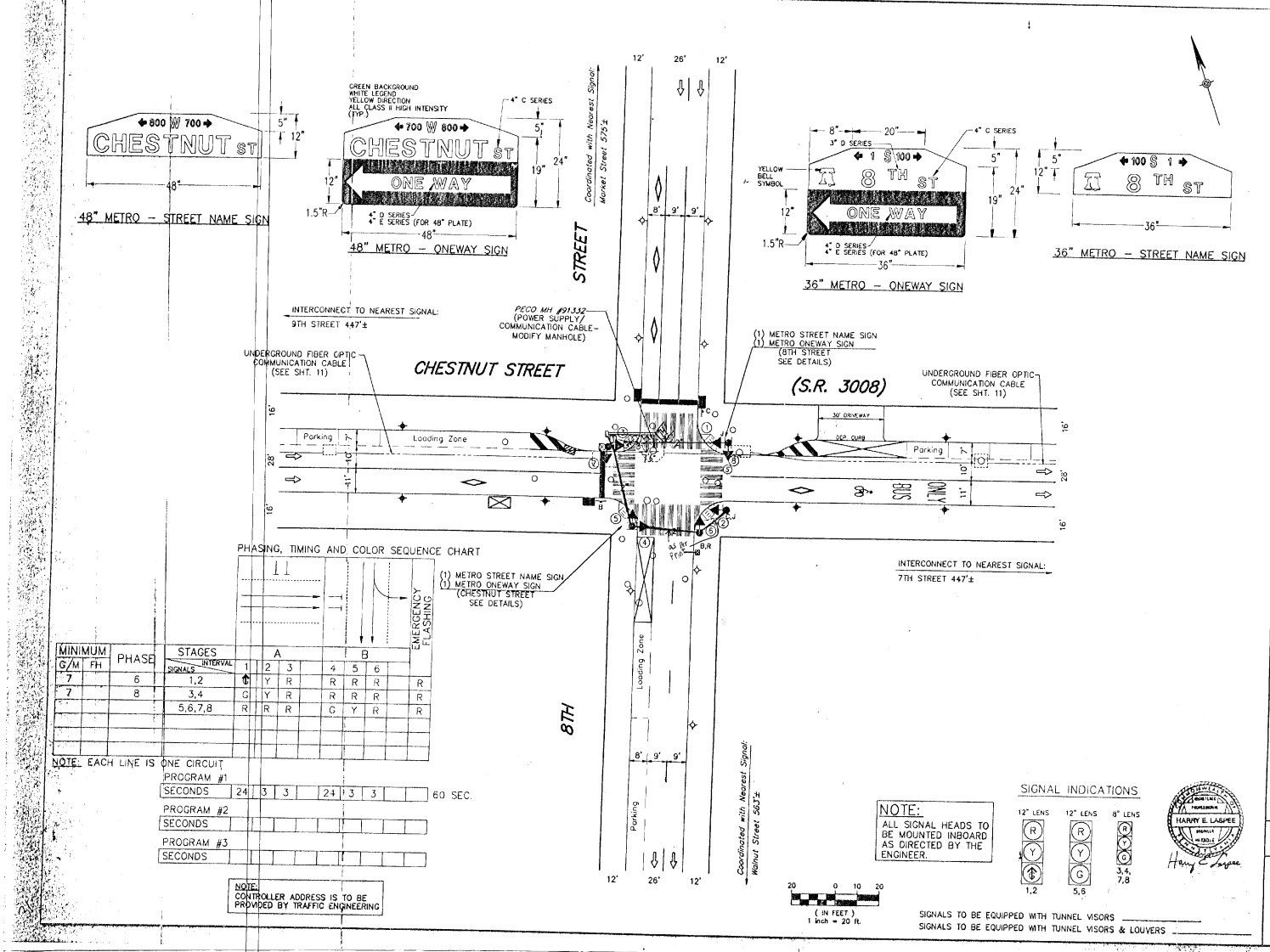
SHEET 7 of 43

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-5	PHILADELPHIA	3008		8 OF 11

CITY OF PHILADELPHIA

NO.	REVISION	DATE

APPROVED Charles Bruno CITY TRAFFIC ENGINEER DATE 11/4/99



PHASING, TIMING AND COLOR SEQUENCE CHART

MINIMUM G/M	MINIMUM FH	PHASE	STAGES / INTERVAL / SIGNALS	A 1	A 2	A 3	B 4	B 5	B 6	EMERGENCY FLASHING
7		6	1,2	↑	Y	R	R	R	R	
7		8	3,4	G	Y	R	R	R	R	R
			5,6,7,8	R	R	R	G	Y	R	R

NOTE: EACH LINE IS ONE CIRCUIT

PROGRAM #1											
SECONDS	24	3	3		24	3	3				60 SEC.
PROGRAM #2											
SECONDS											
PROGRAM #3											
SECONDS											

NOTE:
CONTROLLER ADDRESS IS TO BE PROVIDED BY TRAFFIC ENGINEERING

NOTE:
ALL SIGNAL HEADS TO BE MOUNTED INBOARD AS DIRECTED BY THE ENGINEER.

SIGNAL INDICATIONS

SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS _____
SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS & LOUVERS _____

MATERIAL LIST

160	L.F.	CONDUIT, 2 INCH
55	L.F.	CONDUIT, 3 INCH
8	EACH	CONDUIT ELBOW, 2 INCH
6	EACH	CONDUIT ELBOW, 3 INCH
95	L.F.	CONDUIT TRENCH AND RESTORATION
1	EACH	TRAFFIC JUNCTION BOX, 18"x24"
2	EACH	UTILITY MANHOLE MODIFICATION
3	EACH	C-POST, 20 FT.
2	EACH	PEDESTAL POLE (SW & NW CORNERS)
4	EACH	SIGNAL HEAD, 12 INCH, 3 SECTION
4	EACH	SIGNAL HEAD, 8 INCH, 3 SECTION
1	EACH	CONTROLLER, TYPE 170, POLE MOUNTED
140	L.F.	SIGNAL CABLE, 5 CONDUCTOR
90	L.F.	SIGNAL CABLE, 15 CONDUCTOR
40	L.F.	ELECTRICAL SERVICE WIRE
1	EACH	CONNECTION OF ELECTRICAL SERVICE CABLE
1	INT.	REMOVE EXISTING SIGNAL EQUIPMENT
6	EACH	TRAFFIC SIGN – POST MOUNTED
1	EACH	36" METRO STREET NAME SIGN
1	EACH	48" METRO STREET NAME SIGN
1	EACH	36" METRO ONEWAY SIGN
1	EACH	48" METRO ONEWAY SIGN

LEGEND

55'	New Mast Arm, Length		Curb ramp
O	Existing C-Post		Utility Pole
●	New C-Post	1	Detector Number
⊠	Controller	△	Support Number
1	Junction Box	✦	Proposed Street Light
7	New Signal Head/Backplate And Number		Direction Arrow
2"	New Conduit and Size		
7	Pedestrian Signal Head/Number		
H A	Pedestrain Pushbutton/Sign		

SIGN TABULATION

QUAN	SYM	SERIES	SIZE	LEGEND
2	B	R6-1L	36"x12"	HORIZONTAL LEFT ONE WAY
2	C	R6-1R	36"x12"	HORIZONTAL RIGHT ONE WAY
2	J	R3-3	24"x24"	NO TURNS
1	R	R10-11	24"x30"	NO TURN ON RED

CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

PROPOSED IMPROVEMENTS FOR

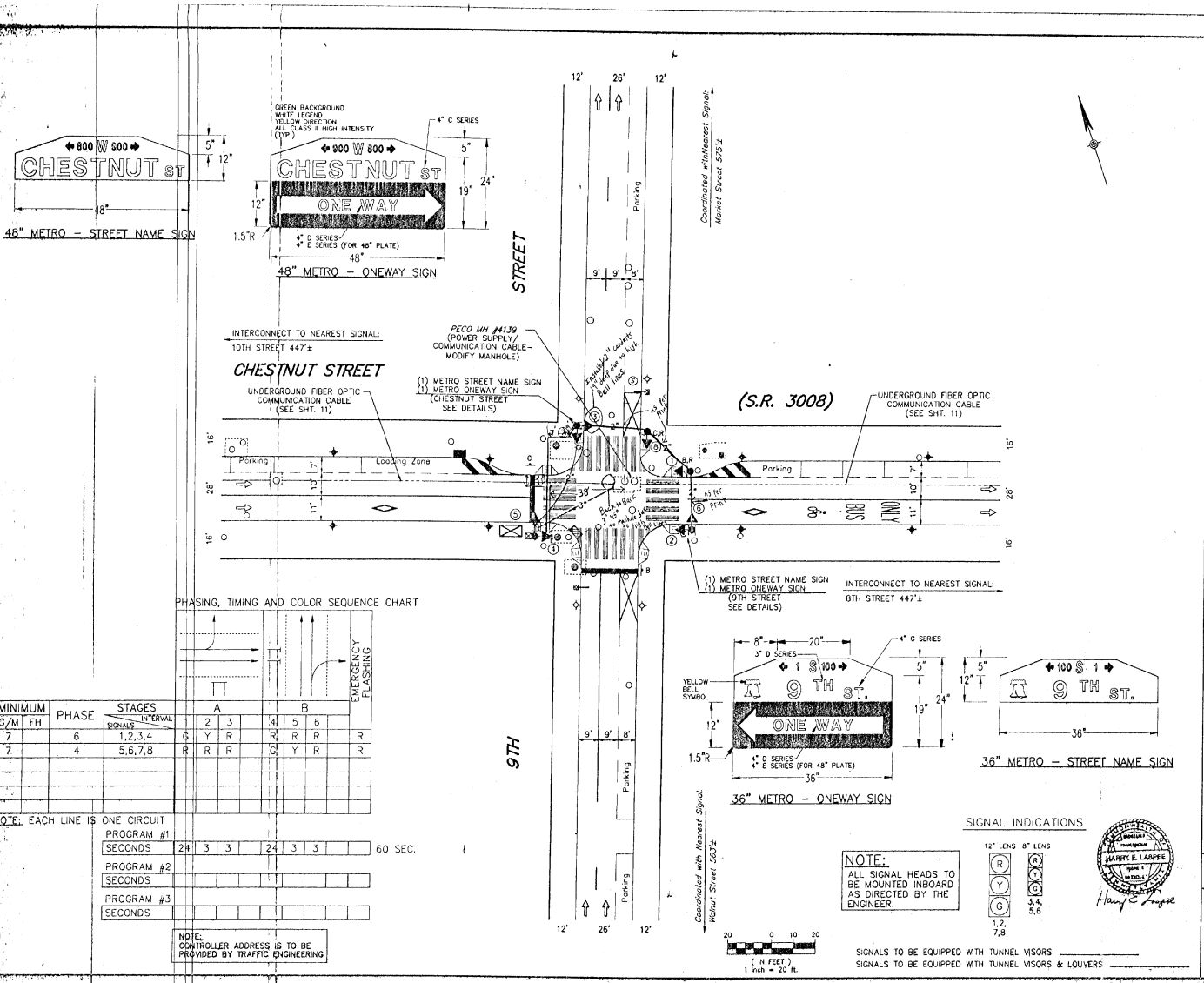
8TH STREET AND CHESTNUT STREET (S.R. 3008)

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-0	PHILADELPHIA	3008		7 OF 11

CITY OF PHILADELPHIA

NO.	REVISION	DATE

APPROVED _____ CITY TRAFFIC ENGINEER DATE 11/6/98



PHASING, TIMING AND COLOR SEQUENCE CHART

MINIMUM G/M	FH	PHASE	STAGES / INTERVAL / SIGNALS	A 2	A 3		B 4	B 5	B 6	EMERGENCY FLASHING
7		6	1,2,3,4	G	Y	R	R	R	R	R
7		4	5,6,7,8	R	R	R	G	Y	R	R

NOTE: EACH LINE IS ONE CIRCUIT

PROGRAM #1										
SECONDS	24	3	3		24	3	3			60 SEC.
PROGRAM #2										
SECONDS										
PROGRAM #3										
SECONDS										

NOTE:
CONTROLLER ADDRESS IS TO BE PROVIDED BY TRAFFIC ENGINEERING

MATERIAL LIST

160	L.F.	CONDUIT, 2 INCH
55	L.F.	CONDUIT, 3 INCH
8	EACH	CONDUIT ELBOW, 2 INCH
6	EACH	CONDUIT ELBOW, 3 INCH
95	L.F.	CONDUIT TRENCH AND RESTORATION
1	EACH	TRAFFIC JUNCTION BOX, 18"x24"
2	EACH	UTILITY MANHOLE MODIFICATION
3	EACH	C-POST, 20 FT.
2	EACH	PEDESTAL POLE (SW & NW CORNERS)
4	EACH	SIGNAL HEAD, 12 INCH, 3 SECTION
4	EACH	SIGNAL HEAD, 8 INCH, 3 SECTION
1	EACH	CONTROLLER, TYPE 170, POLE MOUNTED
140	L.F.	SIGNAL CABLE, 5 CONDUCTOR
90	L.F.	SIGNAL CABLE, 15 CONDUCTOR
40	L.F.	ELECTRICAL SERVICE WIRE
1	EACH	CONNECTION OF ELECTRICAL SERVICE CABLE
1	INT.	REMOVE EXISTING SIGNAL EQUIPMENT
6	EACH	TRAFFIC SIGN – POST MOUNTED
1	EACH	48" METRO STREET NAME SIGN
1	EACH	36" METRO STREET NAME SIGN
1	EACH	36" METRO ONEWAY SIGN
1	EACH	48" METRO ONEWAY SIGN

LEGEND

35'	New Mast Arm, Length		Curb ramp
	Existing C-Post		Utility Pole
	New C-Post	1	Detector Number
	Controller		Support Number
	Junction Box		Proposed Street Light
2	New Signal Head/Backplate And Number		Direction Arrow
2"	New Conduit and Size		
7	Pedestrian Signal Head/Number		
A	Pedestrain Pushbutton/Sign		

SIGN TABULATION

QUAN	SYM	SERIES	SIZE	LEGEND
2	B	R6-1L	36"x12"	HORIZONTAL LEFT ONE WAY
2	C	R6-1R	36"x12"	HORIZONTAL RIGHT ONE WAY
2	R	R10-11	24"x30"	NO TURN ON RED

CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

PROPOSED IMPROVEMENTS FOR

9TH STREET AND CHESTNUT STREET (S.R. 3008)

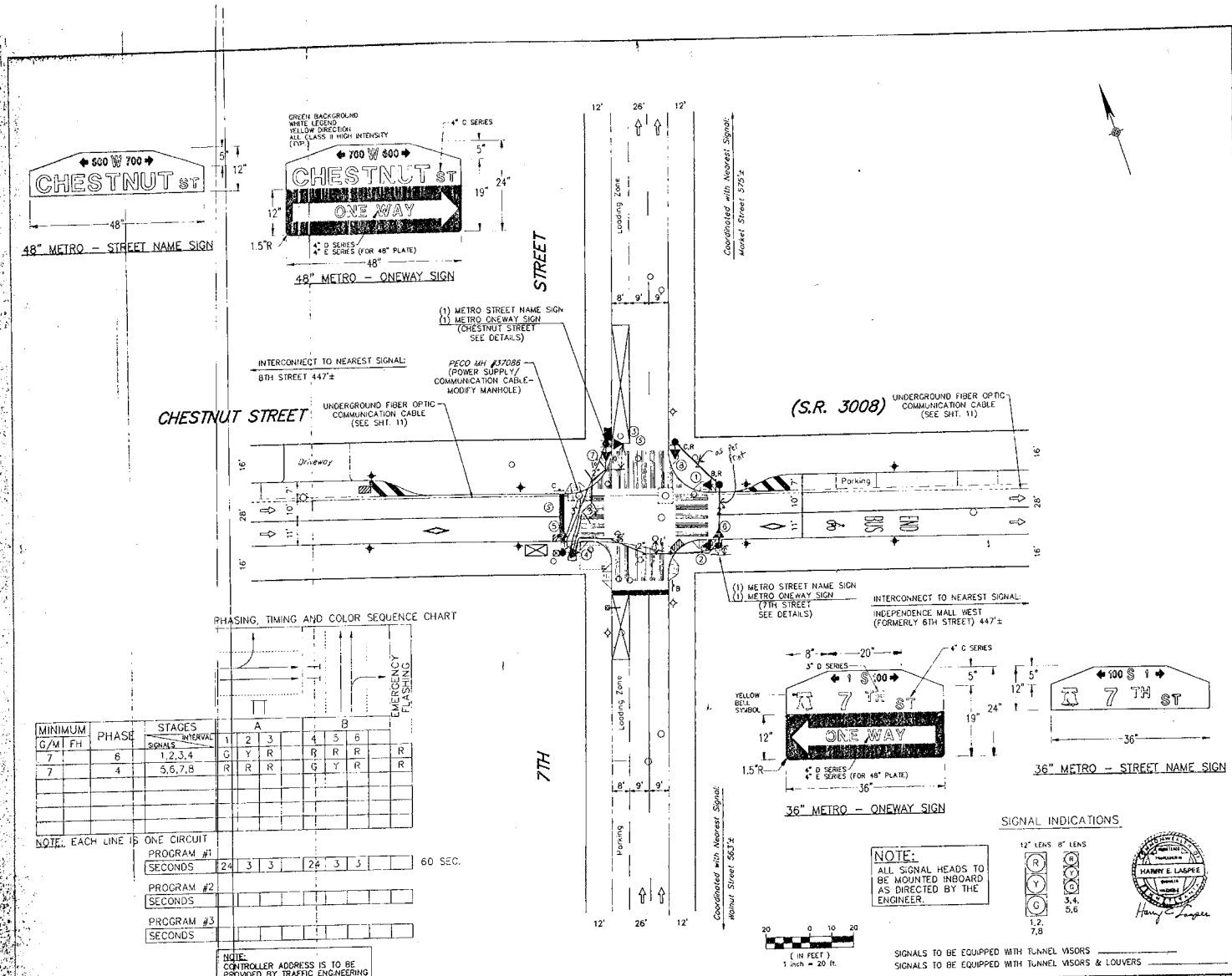
RHST 7989.008.00 T2006 9/16/98

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
6-3	PHILADELPHIA	3008		9 OF 11

CITY OF PHILADELPHIA

NO.	REVISION	DATE

APPROVED [signature] CITY TRAFFIC ENGINEER DATE 4/8/98



PHASING, TIMING AND COLOR SEQUENCE CHART

MINIMUM G/M	MINIMUM FH	PHASE	STAGES / INTERVAL / SIGNALS	A 1	A 2	A 3	B 4	B 5	B 6	EMERGENCY FLASHING
7		6	1,2,3,4	G	Y	R	R	R	R	R
7		4	5,6,7,8	R	R	R	G	Y	R	R

NOTE: EACH LINE IS ONE CIRCUIT

PROGRAM #1										
SECONDS	24	3	3		24	3	3			60 SEC.
PROGRAM #2										
SECONDS										
PROGRAM #3										
SECONDS										

NOTE: CONTROLLER ADDRESS IS TO BE PROVIDED BY TRAFFIC ENGINEERING

MATERIAL LIST

160	L.F.	CONDUIT, 2 INCH
55	L.F.	CONDUIT, 3 INCH
8	EACH	CONDUIT ELBOW, 2 INCH
6	EACH	CONDUIT ELBOW, 3 INCH
95	L.F.	CONDUIT TRENCH AND RESTORATION
1	EACH	TRAFFIC JUNCTION BOX, 18"x24"
2	EACH	UTILITY MANHOLE MODIFICATION
3	EACH	C-POST, 20 FT.
2	EACH	PEDESTAL POLE (SW & NW CORNERS)
4	EACH	SIGNAL HEAD, 12 INCH, 3 SECTION
4	EACH	SIGNAL HEAD, 8 INCH, 3 SECTION
1	EACH	CONTROLLER, TYPE 170, POLE MOUNTED
140	L.F.	SIGNAL CABLE, 5 CONDUCTOR
90	L.F.	SIGNAL CABLE, 15 CONDUCTOR
40	L.F.	ELECTRICAL SERVICE WIRE
1	EACH	CONNECTION OF ELECTRICAL SERVICE CABLE
1	INT.	REMOVE EXISTING SIGNAL EQUIPMENT
6	EACH	TRAFFIC SIGN – POST MOUNTED
1	EACH	36" METRO STREET NAME SIGN
1	EACH	48" METRO STREET NAME SIGN
1	EACH	36" METRO ONEWAY SIGN
1	EACH	48" METRO ONEWAY SIGN

LEGEND

New Mast Arm, Length	Curb ramp
Existing C-Post	Utility Pole
New C-Post	Detector Number
Controller	Support Number
Junction Box	Proposed Street Light
New Signal Head/Backplate And Number	Direction Arrow
New Conduit and Size	
Pedestrian Signal Head/Number	
Pedestrain Pushbutton/Sign	

SIGN TABULATION

QUAN	SYM	SERIES	SIZE	LEGEND
2	B	R5-1L	36"x12"	HORIZONTAL LEFT ONE WAY
2	C	R5-1R	36"x12"	HORIZONTAL RIGHT ONE WAY
2	R	R10-11	24"x30"	NO TURN ON RED

CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

PROPOSED IMPROVEMENTS FOR

7TH STREET AND CHESTNUT STREET (S.R. 3008)

PHST 7989.008.00 T2008 9/16/98

16087

DIST	COUNTY	ROUTE	SECT	SHEET
6-0	PHILADELPHIA	-		5 of 43

CITY OF PHILADELPHIA

REVISION NUMBER	REVISIONS	DATE	BY

APPROVED Charles J. Kraemer TRAFFIC ENGINEER DIVISION DATE 10/1/93

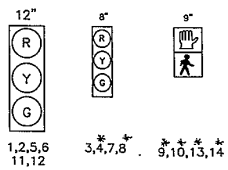
DESIGN REVIEW Douglas Shaw PENNDOT TRAFFIC ENGINEER DATE 10/25/93

PHASING, TIMING AND COLOR SEQUENCE CHART

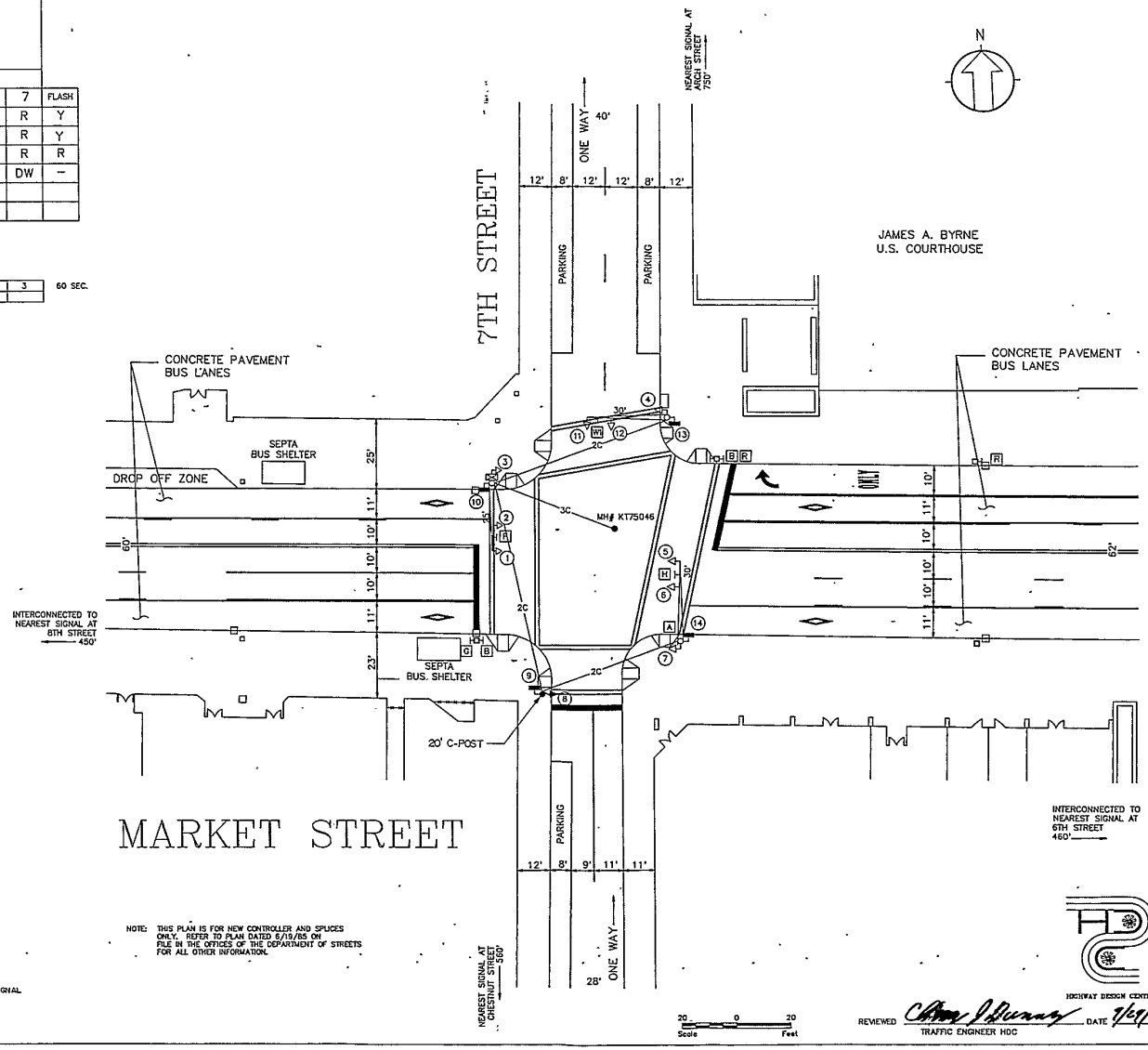
	PHASE	A			B				
	INTERVAL / SIGNALS	1	2	3	4	5	6	7	FLASH
SIGNAL GROUP	1,2,3,4	G	Y	R	R	R	R	R	Y
	5,6,7,8	G	Y	R	R	R	R	R	Y
	11,12	R	R	R	G	G	Y	R	R
	9,10,13,14	DW	DW	DW	W	FDW	DW	DW	–

PROGRAM 1								
SECONDS	29	3	3	10	9	3	3	60 SEC.

SIGNAL INDICATIONS



* INDICATES NEW SIGNAL



NOTE: THIS PLAN IS FOR NEW CONTROLLER AND SPLICES ONLY. REFER TO PLAN DATED 6/19/85 ON FILE IN THE OFFICES OF THE DEPARTMENT OF STREETS FOR ALL OTHER INFORMATION.

HIGHWAY DESIGN CENTER

REVIEWED Chas J. Burns TRAFFIC ENGINEER HDC DATE 7/29/93

MATERIAL LIST

QUANTITY/UNIT	DESCRIPTION
1 EA	170 CONTROLLER, SOLID STATE
1 EA	RENEW SPLICES
4 EA	PED HEAD 9-INCH 2-SECTION
1 EA	TRAFFIC C-POST, 20'
2 EA	SIGNAL HEAD 8-INCH 3- SECTION
50 LF	ELECTRICAL SERVICE WIRE
45 LF	TRAFFIC SIGNAL CABLE, 5-CONDUCTOR

LEGEND

35'	EXISTING MAST ARM, LENGTH		NEW CURB RAMP
35	NEW MAST ARM, LENGTH		EXISTING CURB RAMP
	EXISTING C-POST		EXISTING TREE
	NEW C-POST		EXISTING GRATE INLET
	CONTROLLER		EXISTING INLET
	EXISTING SIGNAL HEAD AND NUMBER		EXISTING STREET LIGHT
	NEW SIGNAL HEAD AND NUMBER		NEW STREET LIGHT
–C–	EXISTING 2" CONDUIT	FH	EXISTING FIRE HYDRANT
–3C–	EXISTING CONDUIT AND SIZE		EXISTING MAIL BOX
–2–	NEW CONDUIT AND SIZE	–A	SIGN & SYMBOL

SIGN TABULATION

QUAN	SYM	SERIES	SIZE	LEGEND
0	A	R6-2L	24 X 30	ONE WAY - LEFT
0	B	R6-2R	24 X 30	ONE WAY - RIGHT
0	F	R6-2R	36 X 36	ONE WAY - RIGHT
0	G	R3-3	24 X 24	NO TURNS
0	H	R3-3	36 X 36	NO TURNS
0	R	R3-7R	30 X 30	RIGHT LANE MUST TURN RIGHT
0	W-1	R10-11	30 X 36	NO TURN ON RED

CITY OF PHILADELPHIA

TRAFFIC CONTROL SYSTEM

7TH STREET and MARKET STREET

SHEET 5 of 43