

CONTROLLER TIMING CHART

PHASE	1	2	3	4	5	6	7	8	9
IN USE	X	X		X	X	X		X	
TRAFFIC MOVEMENT	←	→	↔	←	→	↔	←	→	↔
MIN. GREEN	5	8		5	5	8		5	
MAX 2 - GREEN (AM)	9	40		14	14	40		12	
MAX 1 - GREEN (OFF)	9	37		13	9	37		12	
MAX 3 - GREEN (PM)	9	52		12	9	52		12	
YELLOW CLEARANCE	4.4	4.4		4.1	4.4	4.4		3.7	
ALL RED CLEARANCE	1.9	1.9		1.9	1.9	1.9		2.5	
VEHICLE EXTENSION	3	3		3	3	3		3	
RECALL MODE		SOFT				SOFT			

CYCLE LENGTH	PHASE							
	1	2	3	4	5	6	7	8
SPLIT PATTERN 1	94	15	42	19	15	42	18	18
SPLIT PATTERN 2	98	15	46	19	20	41	18	18
SPLIT PATTERN 3	109	15	58	18	15	58	18	18
SPLIT PATTERN 4	103	15	46	24	20	41	18	18

TIME OF DAY PROGRAM

FLASH	WEEKDAY TIMINGS	
	TO	TO
SPLIT PATTERN 2	12:00 AM	6:00 AM
SPLIT PATTERN 2	6:00 AM	7:30 AM
SPLIT PATTERN 4	7:30 AM	8:00 AM
SPLIT PATTERN 2	8:00 AM	9:00 AM
SPLIT PATTERN 1	9:00 AM	2:45 PM
SPLIT PATTERN 4	2:45 PM	3:15 PM
SPLIT PATTERN 3	3:15 PM	6:00 PM
SPLIT PATTERN 1	6:00 PM	10:00 PM
FLASH	10:00 PM	12:00 AM

- TRAFFIC CONTROL SIGNAL SYSTEM, INTERSECTION**
SEE LIST OF MAJOR EQUIPMENT, THIS SHEET
- CONSTRUCT MAST ARM POLES**
STA. 164+49, RT (MAP2)
STA. 165+03, LT (MAP1)
- CONSTRUCT CONTROLLER CABINET (GROUND-MOUNTED)**
STA. 165+09, LT
- WIRED CONDUIT (2" (SCH 80))**
SEE CHART, THIS SHEET
- SPECIAL PROVISION (HORIZONTAL DIRECTIONAL DRILLING) (12" CASING PIPE)**
STA. 164+61, LT (DPB-1) - STA. 164+76, RT (PB-1) - 70'
STA. 164+61, LT (DPB-1) - STA. 165+33, RT (PB-2) - 83'
- ELECTRICAL CONDUIT (2" (SCH 80))**
SEE CHART, THIS SHEET
- PULLBOX, STANDARD**
STA. 164+76, LT (PB-1)
STA. 165+33, RT (PB-2)
- PULLBOX, DOUBLE**
STA. 164+61, RT (DPB-1)
- LIGHT POLE**
STA. 164+69, LT (SL-1)
STA. 165+42, RT (SL-3)
- BREAKAWAY FEATURE FOR LIGHT POLE**
STA. 164+69, LT (SL-1)
STA. 165+42, RT (SL-3)
- BRACKET ARM**
MAP-2 (SL-2)
STA. 164+69, LT (SL-1)
STA. 165+42, RT (SL-3)
- SPECIAL PROVISION (LUMINAIRE, LED)**
MAP-2 (SL-2)
STA. 164+69, LT (SL-1)
STA. 165+42, RT (SL-3)

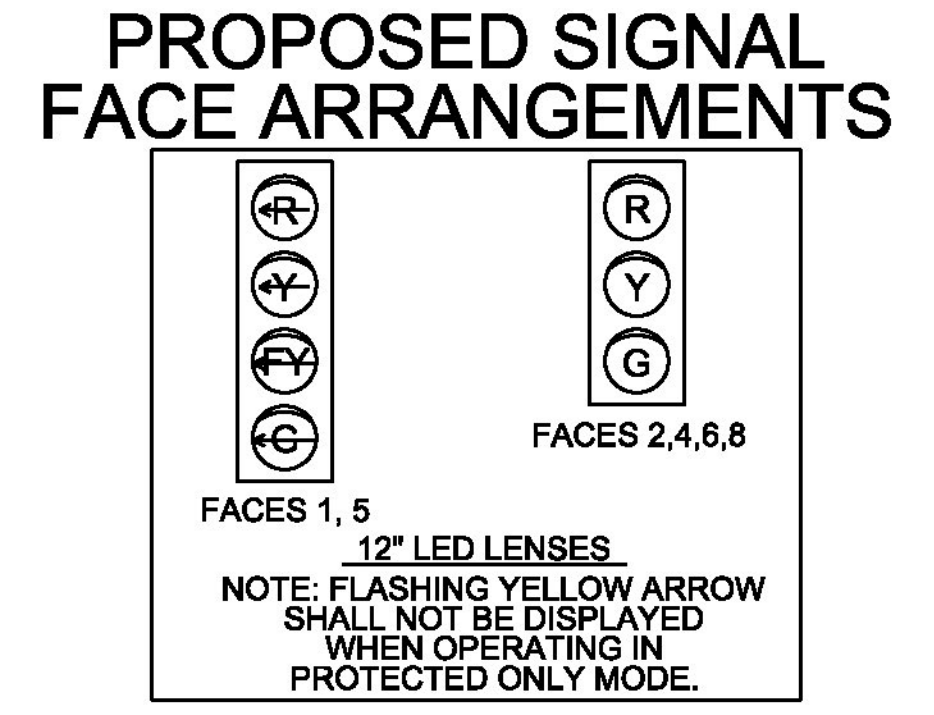
CONDUIT	WIRED CONDUIT SIZE		ELECTRICAL CONDUIT SIZE		DESCRIPTION
	2"	4"	2"	4"	
POLE TO STANCHION	25	48.4			POWER
POLE TO STANCHION - CABINET			25	38	COMMUNICATIONS
STANCHION TO CABINET	45	10.42			POWER
STANCHION TO CABINET			15		COMMUNICATIONS
CONTROLLER TO MAP1	49	9.15			SIGNAL/LIGHTING
CONTROLLER TO MAP1	49	9.15			DETECTION
CONTROLLER TO MAP1			43	9.2	FUTURE USE
CONTROLLER TO PB1	39	36.08			SIGNAL/LIGHTING
CONTROLLER TO PB1	39	36.08			DETECTION
CONTROLLER TO PB1			30	36.08	FUTURE USE
PB1 TO DPB1	70	83.16			SIGNAL/LIGHTING
PB1 TO DPB1	70	83.16			DETECTION
PB1 TO DPB1			70	83.17	FUTURE USE
DPB1 TO MAP2	40	17			SIGNAL/LIGHTING
DPB1 TO MAP2	40	17			DETECTION
DPB1 TO MAP2			40	17	FUTURE USE
DPB1 TO PB2	86	79.84			SIGNAL/LIGHTING
DPB1 TO PB2	86	79.84			FUTURE PED USE
DPB1 TO PB2			86	79.83	FUTURE USE
PB2 TO SL3	24	30			SIGNAL/LIGHTING
PB2 TO SL3			24	30	FUTURE USE
PB1 TO SL1	40	21.25			SIGNAL/LIGHTING
PB1 TO SL1			40	21.25	FUTURE USE
SUBTOTAL	564	560.53	326	314.53	
ROUNDING	9	-0.03	4	-0.03	
TOTALS	564	560.5	326	314.5	

LIST OF MAJOR EQUIPMENT

EQUIPMENT UNDER PAY ITEM 678.15 - (US ROUTE 7 & LITTLE CHICAGO/MIDDLEBROOK ROADS)	QUANTITY	REMARKS
STEEL MAST ARM SIGNAL POLE	2	FLAT BLACK, MAP 1=20', MAP 2=29'
STEEL MAST ARMS	4	FLAT BLACK, MA 1A=30', MA 1B=20', MA 2A=40', MA 2B=20'
POWER METER ON STANCHION	1	WITH TWO BAY BREAKER PANEL
TRAFFIC SIGNAL CONTROLLER	1	ECONOLITE ASC/3-2100 NEMA TS-2
NEW 12-INCH LED SIGNAL HEADS (ONE-WAY, 3-SECTION, VISORS, DISCONNECT HANGERS, BACKPLATES AND MOUNTING HARDWARE)	8	FLAT BLACK
NEW 12-INCH LED SIGNAL HEADS (ONE-WAY, 4-SECTION, VISORS, DISCONNECT HANGERS, BACKPLATES AND MOUNTING HARDWARE)	2	FLAT BLACK
GPS TIME CLOCK	1	INSTANTANEOUS UPDATING
NEMA P44 BASE MOUNTED CONTROLLER CABINET WITH 15-INCH EXTENDED BASE ON A CONCRETE FOUNDATION, PAINTED FLAT BLACK WITH ANCILLARY EQUIPMENT	1	FLAT BLACK
DETECTOR ASSEMBLY	4-6	AS REQUIRED
VEHICLE DETECTION PROCESSOR (CARDS)	1-4	AS REQUIRED

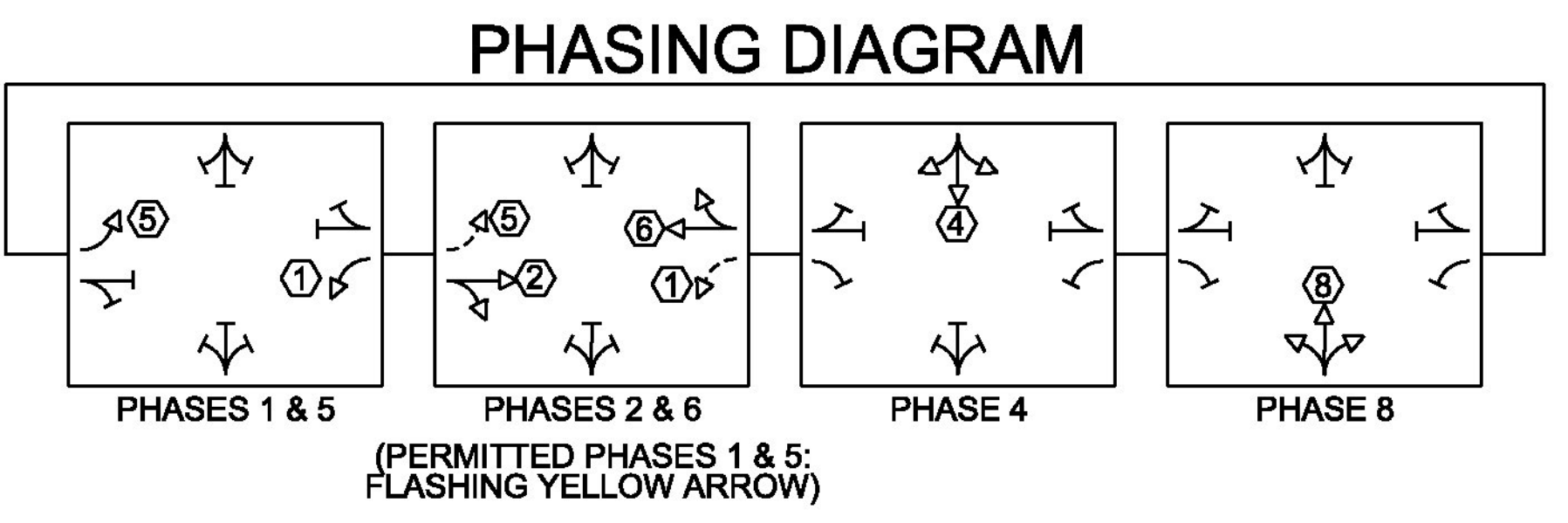
2014 HOURLY VOLUMES US ROUTE 7 & LITTLE CHICAGO

AM	OFF	PM
20	25	15
520	450	610
20	20	25



- NOTES:**
- TRAFFIC ITEMS LISTED ARE APPROXIMATE LOCATIONS AND MAY BE MODIFIED BY THE ENGINEER IN THE FIELD.
 - CONDUIT NOTED AS FUTURE USE WILL BE PAID AS ELECTRICAL CONDUIT. ALL WIRED CONDUIT, REGARDLESS OF TYPE, WILL BE PAID AS WIRED CONDUIT.
 - STOP BAR AND ADVANCE DETECTOR MOUNTING LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR IN ACCORDANCE WITH THE MANUFACTURER'S GUIDANCE FOR THE TYPE OF DETECTOR SUPPLIED. THE CONTRACTOR SHALL SUBMIT PROPOSED MOUNTING LOCATIONS AND DOCUMENTATION OF CONFORMANCE WITH THE MANUFACTURER'S GUIDANCE TO THE ENGINEER FOR APPROVAL.
 - SLEEVE S2 IS ANTICIPATED TO CROSS UNDER AN EXISTING DRAINAGE PIPE AT APPROXIMATE STA. 20+50 LT, 26.5'. THE EXISTING DRAINAGE INVERT IS APPROXIMATE 4' BELOW GRADE.
 - ALL WORK RELATED TO PROVIDING A FULLY FUNCTIONAL TRAFFIC SIGNAL SYSTEM, INCLUDING ALL DETECTION EQUIPMENT, WILL BE PAID FOR UNDER ITEM 678.15 TRAFFIC CONTROL SIGNAL SYSTEM, INTERSECTION UNLESS OTHERWISE SPECIFIED.

- ### LEGEND
- CC CONTROLLER CABINET
 - PB PULLBOX
 - ② SIGNAL HEAD WITH PHASE NO.
 - WIRED CONDUIT
 - WIRED CONDUIT IN ELECTRICAL CONDUIT SLEEVE
 - ① MAST ARM-MOUNTED SIGN
 - ② VEHICLE STOP BAR DETECTOR
 - ② VEHICLE STOP BAR DETECTION AREA
 - * PREEMPTION STROBE LIGHT & DETECTOR LUMINAIRE



PROJECT NAME: FERRISBURGH	PLOT DATE: 3/8/2016
PROJECT NUMBER: NHG SCNL(42)	DRAWN BY: K. RECORD
FILE NAME: +13b016+tsl.dgn	CHECKED BY: P. COBURN
PROJECT LEADER: I. DEGUTIS	SHEET 15 OF 22
DESIGNED BY: I. DEGUTIS	
TRAFFIC SIGNAL PLAN	